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ABSTRACT

A major objective of the study reported here was to assess how open the opportunity structure is for minority youth motivated enough to acquire vocational training. A second objective was to examine in detail a critical phase of the occupational cycle, the first few years in the labor force, which research has shown is critical for occupational and economic mobility. The study, funded by the Social Security Administrative, was distinctive in that the data were based entirely on the collation of high school records of graduates with Social Security work-history records. It was decided to concentrate the exposition to a single school: the High School of Fashion Industries (HSFI) in New York City. HSFI is a unit industry school. Unit trade schools are generally superior to multi-industry schools. Not only are their facilities oriented toward a specific industry, they are in close communication with employers concerning standards of training and job placement. By reducing the range of trades, it is possible to explore the data in much greater depth. Graduates from June 1956 to June 1963 were selected for study. Of 2,293 graduates in 13 curricula selected for study, the Social Security Administration was able to locate the work-history records of 1950 graduates, approximately 85 percent. This account dealt with the four core curricula: Fashion Design, Technical and Vocational; Trade Dressmaking, Vocational; and Garment Operating. (Author/JM)

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BUREAU OF APPLIED SOCIAL RESEARCH

EMPLOYMENT OPPORTUNITIES OF NEGRO AND WHITE YOUTH

Bernard Levenson

UD 014445

BUREAU OF APPLIED SOCIAL RESEARCH

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FINAL REPORT

Project #164
Social Security Administration

EMPLOYMENT OPPORTUNITIES OF NEGRO AND WHITE YOUTH

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July 1973

FOREWORD

The employment, earnings, and placement data in this research are based on work-history data provided by the Social Security Admimistration. These data were obtained on a statistical basis only and do not involve disclosure of the identity of any individuals. In making these data available for research, the Social Security Aministration does not assume any responsibility for their analysis or interpretation.

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G. Reprint of article: Bernard Levenson and Mary S. McDill, "A Follow-up Study of Negro and White Youth", Phylon", Vol. XXVII, No. 4 (1966).

CHAPTER 1
INTRODUCTION

When this research began a number of years ago, numerous job training programs were being started to equip minority youth with job skills. Most of the programs have been dismantled by the present administration on the grounds that they were wasteful and ineffective. Though the programs have been abandoned, the problems of youth unemployment continue unabated. In 1971, unemployment among white teenagers aged 16-19 was about 15 per cent; among black teenagers the unemployment rate was 32 per cent.

If the programs were ineffective, it may have been because they were inadequately funded. Or the programs may not have been too successful because of the very nature under which they were forced to operate. For one thing, they attempted to reach youth already alienated, those whose motivations to succeed already were trampled by their life in poverty. For another, many of these programs were hastily improvised and often not tied into the job market of the communities in which they were located. Furthermore, the training offered by many of these programs was of relatively short duration.

A belief underlying this research has been that the strategic site for measuring the efficacy of vocational training is the established vocational high school. The vocational high school has fewer drawbacks than most of the job training programs that came into being in the context on the war on poverty. Graduates of these schools apparently do not suffer from lack of motivation. On the contrary, they were sufficiently motivated to succeed to have persisted with their high school studies to the point of graduation. Moreover, these graduates have undergone a

far more extensive program that qualifies them for entrance into relatively skilled trades. And perhaps, most important, the vocational school is usually more integrated with the industrial community, maintaining close relations with employers, unions, and state employment agencies As a result there is a much higher probability that its graduates will find regular employment. For these reasons, the vocational school graduates provide a strategic group for assessing the value of vocational training as a solution to the poverty problem and for demonstrating that such training will enable minority group members to break the vicious cycle of poverty. Unfortunately, all those concerned with the problem of youth unemployment agree that there is a lamentable lack of data concerning the effects of vocational education and the process of induction into the labor market.

The study reported here was funded by the Social Security Administration and focuses on the employment opportunities of Negro, Puerto Rican and white youth. The distinctive aspect of the study is that the data are based entirely on the collation of high school records of graduates with Social Security work-history records. Although not a single graduate was interviewed, it has been possible to match graduates on their training and relative earnings for several years after graduation from high school. Although, we know nothing about the attitudes and values of the graduates, about their family backgrounds and aspirations and specific encounters they may have had with discrimination in employment, the statistics can take us remarkably far in mapping the transition from vocational school to work.

A major objective of the study has been to assess how open the opportunity structure is for minority youth motivated enough to acquire vocational training. A second objective has been to examine in detail

a critical phase of the occupational cycle, the first few years in the labor force, which research has shown is critical for occupational and economic mobility.

For a number of reasons, we have decided to concentrate the exposition to a single school. The data are highly quantitative and a report of thirty five or forty curricula in a dozen schools would tax even the specialist. Secondly, we know more about the school -- the High School of Fashion Industries in New York City -- than any other school studied. HSFI is a unit industry school geared to the apparel industry. Unit trade schools are generally superior to multi-industry schools. Not only are their facilities oriented towards a specific industry, they they are in close communication with employers concerning standards of training and job placement. By reducing the range of trades, it permits us to explore the data in much greater depth. HSFI is considered one of the best vocational schools in the New York city system.

Graduates from June 1956 to June 1963 were selected for study. Of 2,293 graduates in 13 curricula selected for study, the Social Security Administration was able to locate the work-history records of 1,950 graduates, approximately 85 percent. This account will deal with the four core curricula.

CHAPTER 2

ETHNICITY AND TRACKING

Studies of racial composition of schools frequently show white-nonwhite percentages in each school and depending on the closeness of the percentages to the population or to some other a priori standard are classified as integrated or segregated. To facilitate the study of racial and ethnic composition, the New York City Board of Education classified the city's schools into three types.[1] For high schools, the three types were defined as follows:

Type	Ethnic Composition	Blacks or Puerto Ricans (Per cent)
X	Segregated nonwhite	85 - 100
Z	Integrated	15 - 85
Y	Segregated white	0 - 15

To know that a particular school is classified as "Z" does tell us something about it but it does not reveal the degree of internal segregation. At the elementary school level, ability-grouping is common and that invariably means that there is some segregation within schools. At the secondary school level, students are tracked into different academic, commercial, or vocational curricula; it is safe to predict that blacks and Puerto Ricans will not be placed in the various curricula in the same proportions as whites.

1. Eleanor B. Sheldon and Raymond A. Glazier, Pupils and Schools in New York City, New York: Russell Sage Foundation, 1965.

Judged by the results of ethnic censuses conducted yearly by the city's school teachers, the High School of Fashion Industries has been a "Z"-school since the first ethnic census some twenty years ago. Its ethnic composition for the years 1957 through 1963 is shown in Table 2.1. The ethnic composition for the city's 29 vocational high schools in 1963 is shown in the

TABLE 2.1

HIGH SCHOOL OF FASHION INDUSTRIES ENROLLMENT, BY RACE-ETHNICITY AND BY YEAR (1957-1963)*

	Race-Ethnicity				
Year	Black	Puerto Rican	White	Total	(Number)
1957	.45	.24	.31	1.00	(1,496)
1958	.38	.29	.32	1.00	(1,614)
1959	.40	.30	.31	1.01	(1,745)
1960	.40	.23	.37	1.00	(1,876)
1961	.45	.27	.28	1.00	(2,005)
1962	.47	.24	.30	1.01	(1,741)
1963	.45	.23	.32	1.00	(1,636)

* Source: Central Zoning Unit, New York City Board of Education

trivariate scatter diagram in Figure 2.1. Fashion High is labelled #19. Readers who are not familiar with triangular coordinate graphs may find the following explanation helpful.

Whenever we deal with three component data which total 100

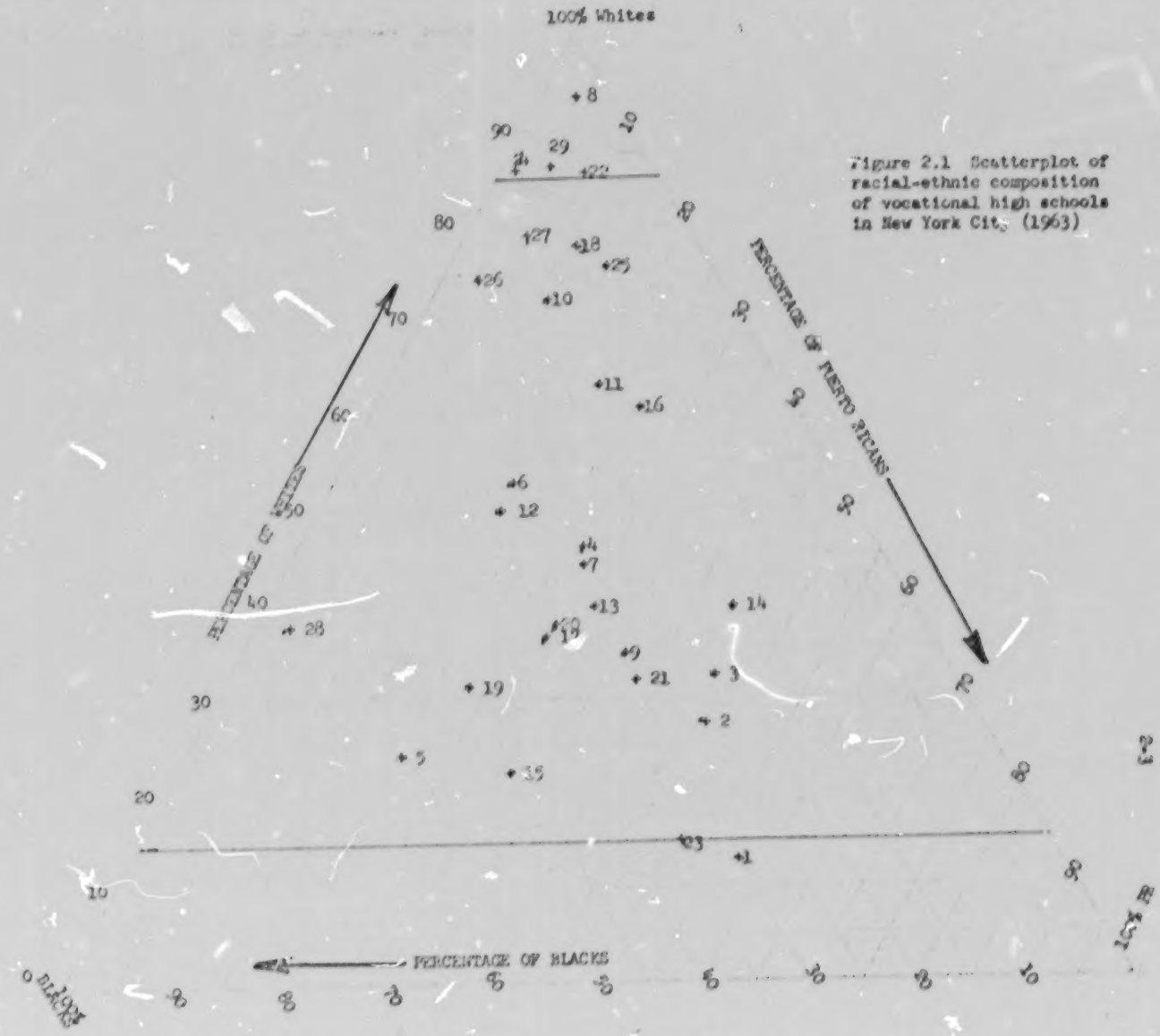

Figure 2.1 Scatterplot of racial-ethnic composition of vocational high schools in New York City (1963)

per cent (or any constant sum), triangular plots are very handy for revealing unexpected patterns, clustering of the units, variability of the mixtures, changes over time in the composition of units. The percentage for each components is scaled along a side of the triangle, with the percentages increasing in a clockwise direction. The white-percentages are shown along the left side; the base represents 0 % whites and the percentages increase until 100% white is reached at the apex. Puerto Rican percentages start at the apex with 0 % Puerto Ricans and increase along the left side of the triangle, reaching 100% Puerto Rican at the lower right vertex. At the lower right vertex, the percentage of blacks is 0 %; it increases along the base and reached 100% black at the lower left vertex. Any combination of the three components which totals 100% is represented by a unique point in the interior or boundary of the triangle. Points close to one of the vertices of the equilateral triangle imply that one component is dominant; points located close to a side of the triangle indicates that one component is very small.

By way of illustration, Figure 2.2 shows how Fashion High is plotted on a triangular graph. Its ethnic composition in 1963 was 32% white, 23% Puerto Rican, and 45% black. Starting at the base of the left side of the triangle, count up until the 32% white-coordinate is reached; then starting at the apex of the triangle, count along the right side until the 23% Puerto Rican coordinate is reached; then start at the base and move left until the 45% black-coordinate is reached. The intersection of the three coordinate lines locates Fashion High.

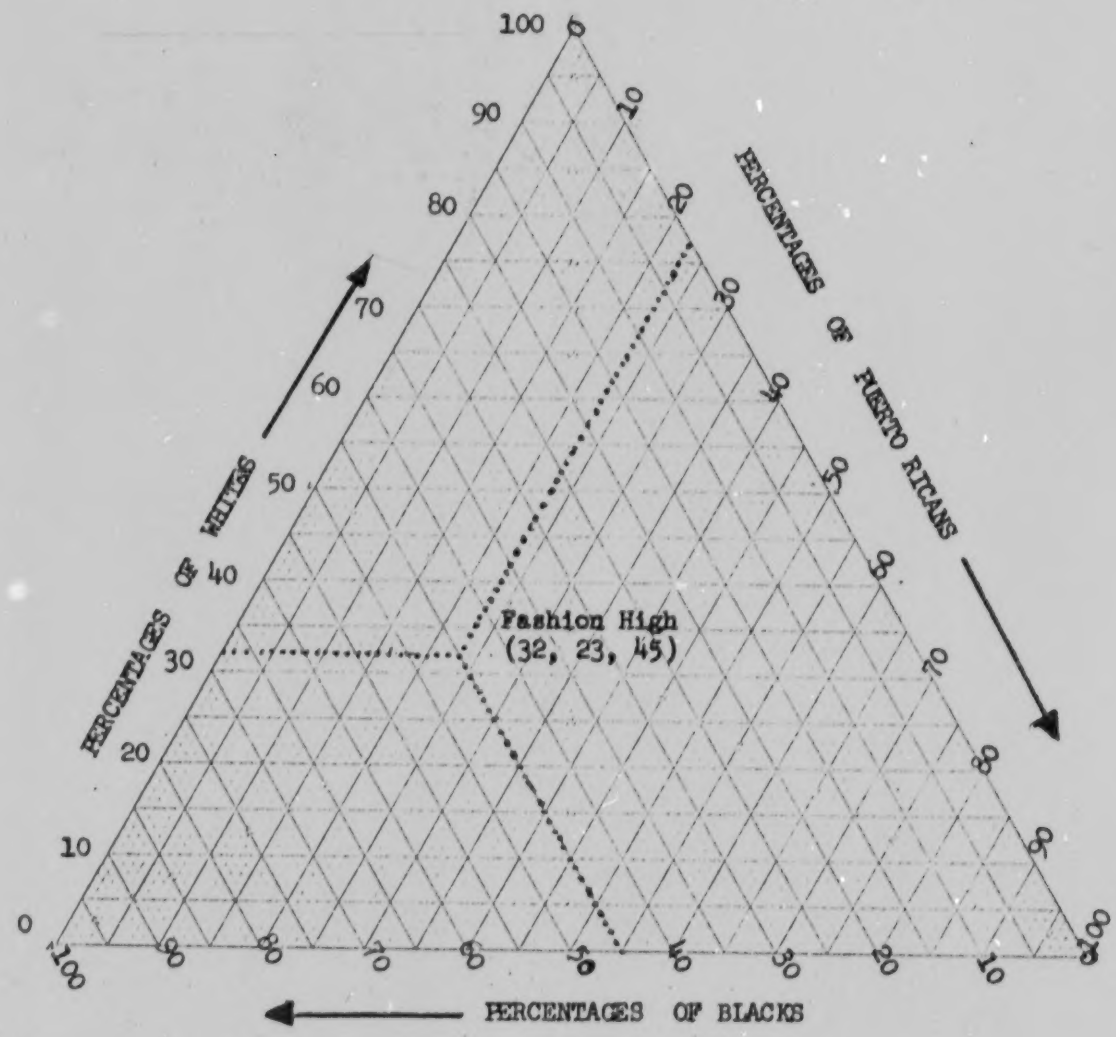

Figure 2.2 Location of Fashion High on triangular graph

Since the sum of each of the three coordinates is 100%, there are only two degrees of freedom, i.e., only two coordinates are necessary to locate a point in the triangle. The third coordinate can serve as a check.

In Figure 2.1, showing the 29 vocational schools, two lines have been drawn so that the triangle is partitioned into regions. The triangular region at the very top represents the "Y" schools, i.e., the segregated white schools; the trapezoidal region at the base represents the "X" schools, the segregated nonwhite schools; and the integrated "Z" schools cover the region between the "X" and "Z" schools. There are two vocational high schools in the segregated nonwhite region: #1 and #23, although #23 is so close to the ethnic boundary that it is difficult to classify. School 23, Yorkville Vocational High School had 14.7 per cent whites: an exchange of two of its black or Puerto Rican students for two white students from another school would convert #23 from segregated nonwhite to integrated. At the top of the triangle, we find four vocational schools in the segregated white region; school #22, the School of Printing, has 85.2 per cent whites; an exchange of four of its white students for four Puerto Rican or black students from another school would convert the School of Printing from segregated white to integrated. In general, the triangular plot suggests two clusters: one group at the top of the triangle numbering nine schools and a much larger group dispersed in the integrated region.

To get some sense of Fashion High in the context of the rest of the New York City school system, the racial-ethnic com-

position of other groups of schools are plotted in Figure 2.3. Note first the arrow AA' at the top of the graph, which represents the academic high schools. The A-end represents the ethnic composition of the academic high schools in 1957. The arrow-head end, A' represents their composition in 1964; in-migrant blacks and Puerto Ricans replaced many whites who transferred to parochial schools or whose families moved to the suburbs. Despite the white losses, academic schools remained closer to the all-white vertex at the top of the triangle than any other type of school.

The arrow marked EE' represents the change in composition of elementary schools. The direction and length of EE' is much like AA', although elementary schools had a higher proportion of blacks and Puerto Ricans in 1956 than did the academic high schools in 1964.

The vocational schools are denoted by the VV' arrow; while not as long as the EE' and AA' arrows, it is pointing in the same direction. In 1956 vocational schools as might be expected had the lowest proportion of whites; in 1964 it again had the lowest proportion of whites but the elementary schools were a close second. In Figure 2.3, the point marked "FH" represents the reported composition of all students at Fashion High from 1957 to 1963: the change is so small that the arrow collapses into a point. After observing the changes in academic high schools, elementary schools, vocational schools, and junior schools, the composition of Fashion High appears to be surprisingly stationary (Table 2.1). In fact, the stationarity raise questions of reliability. First, it is seen quite clearly that major changes

in the ethnic composition of the city's schools seems to have left Fashion High unaffected. Conceivably, the school could have tightened admission requirements. However, that does not seem to be a satisfactory explanation. Our count of the race-ethnicity of graduates for 1957 and 1964 are shown in Figure 2.3 by the arrow "fh". The arrow "fh" indicates a drop in the proportion of white graduates at HSFI and an increase in Puerto Ricans. What makes us doubtful of the reliability of the figures in Table 2.1 is not only the lack of a trend in the year-to-year composition, but also the apparent inconsistency with the composition of graduates. If the school's population did indeed remain stable from 1957 to 1963, it would imply that the rate of dropouts of whites was disproportionately higher than the rate among Puerto Ricans or blacks. As we shall observe in a few pages hence, whites generally received appreciably more favorable curriculum assignments than blacks or Puerto Ricans. We would then be faced with the problem of explaining how the choicest curriculum assignments are conferred on students with the lowest probability of graduating. Furthermore, we shall see in subsequent chapters that whites do far better on the labor market than do blacks or Puerto Ricans. The statistical consequences of our misclassifying the race or ethnicity of graduates would be to attenuate the true differences in earnings between whites on one hand and blacks and Puerto Ricans on the other. The differences already are considerable; if they were much greater, they would be grim. Finally, we should say something about our

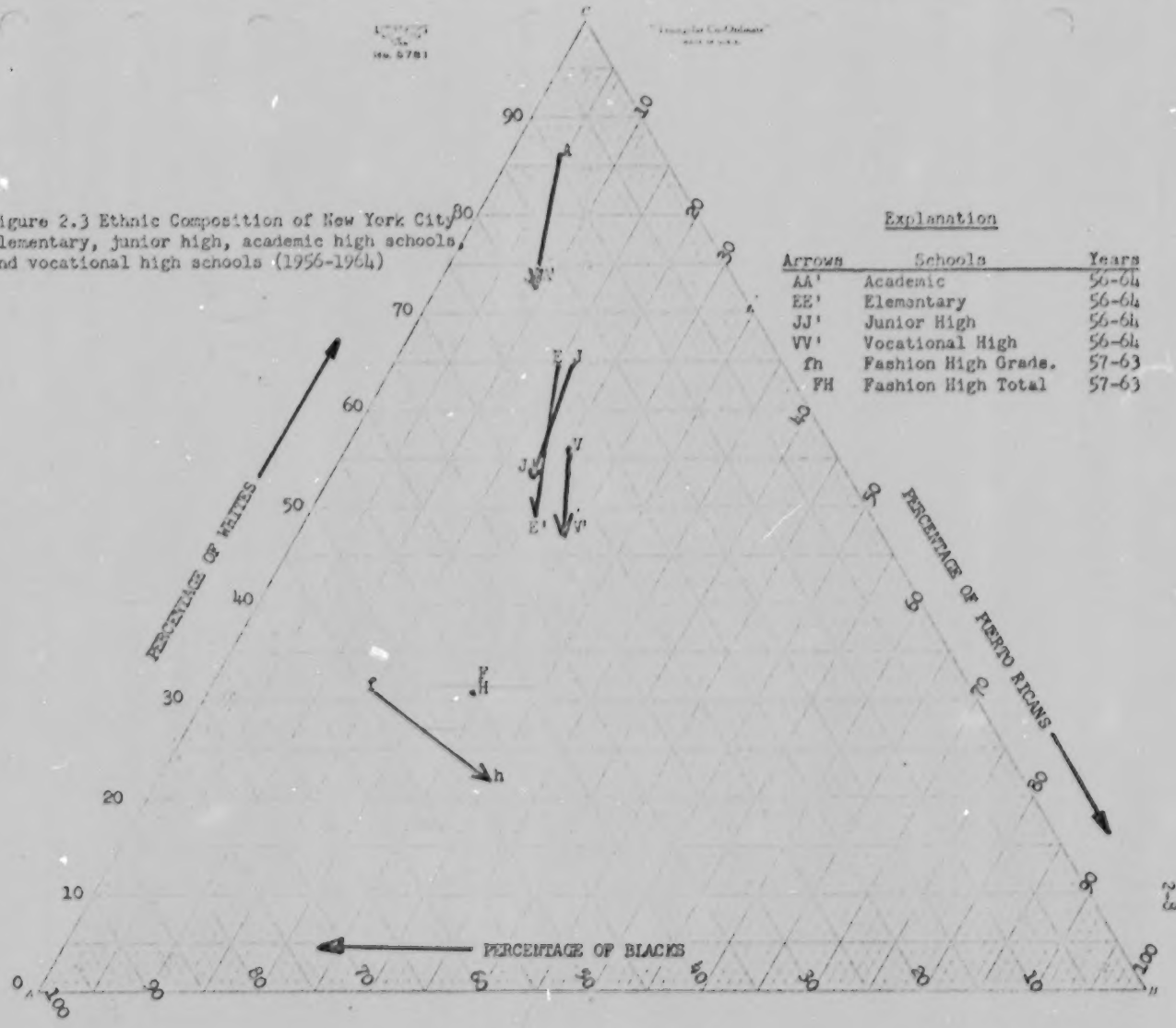

Figure 2.3 Ethnic Composition of New York City elementary, junior high, academic high schools, and vocational high schools (1956-1964)

Explanation

Arrows	Schools	Years
AA'	Academic	56-64
EE'	Elementary	56-64
JJ'	Junior High	56-64
VV'	Vocational High	56-64
fh	Fashion High Grade.	57-63
FH	Fashion High Total	57-63

ethnic classifications. Members of the research team became sociological slueths when it came to resolving doubts about a graduate's race or ethnicity: yearbook pictures were checked, the census tracts of home addresses were checked in U.S. Census of Population and Housing, 1960, New York City; the birthplaces of parents and graduates were considered; school records were checked to see whether a brother or sister of the graduate had attended the school. Almost all classifications were carefully doubly checked; we doubt whether many are incorrectly classified.

We have described the changing ethnic composition of the city's public schools, with poor Puerto Rican and black youngsters replacing middle-class whites. At this point it will be useful to say something concerning the csuses of this ethnic transformation. The background is necessary to assess past gains and future prospects of black and Puerto Rican youth.

The influx of Puerto Ricans into New York City during the last twenty years is mainly a consequence of progress in medical treatment and public health. What happened to the population of Puerto Rico is in varying degrees happening to more than one-half of the population of the world: demographers sometimes refer to it as the "demographic transition". What took a Sweden or an England one hundred years to achieve, an undeveloped country can now telescope in ten or fifteen years. By immunizations of children, control of diseases such as malaria, cholera, smallpox, and yellow fever, purification of its water supply, and other applications of modern hygiene, death rates can be rapidly reduced.

An outside team of medical personnel and public health workers -- from U.N. or from some friendly developed country -- can introduce these death control measures without much participation, cooperation, or even awareness of the citizenry. The cost of the measures might be no more than $2 or $3 per capita. The impact of these measures is immediate. The sharp drop in mortality rates unaccompanied by a corresponding drop in birth rates produces an exponential growth in population. While these dramatic reductions in death rates can be brought about easily by

government, the drop in birth rates is not readily accomplished; it involves changing social habits and traditional values developed when famine and plague and high infant mortality were commonplace.

Our southern neighbor, Mexico, exemplifies this explosive growth in population. Mexico's population is about 54 million. Physicists sometimes use the concept "half-life" to characterize the exponential decay of radioactive materials; demographers talk about "doubling time" for populations which are exponentially growing. Mexico's doubling-time is 21 years: in 1993 Mexico will have a population exceeding 100 million. Each year about 50,000 Mexicans emigrate to the United States and hundreds of thousands, legal and illegal, cross the Rio Grande in search of work. In the next twenty years most of Mexico's energy and economic progress will go into feeding, housing, and schooling 50 million new dependents.

Not too long ago, there was talk of the vanishing Indians. Between 1950 and 1970 American Indians stopped vanishing and doubled their numbers. Its current growth rate is a staggering 5 per cent per year, which means a doubling-time of 15 years. Indian reservations cannot economically support its people; unemployment rates of 35 per cent are typical. With American Indians already living in abject poverty, it is difficult to imagine the despair which a rapid doubling of its numbers will produce.

The people of Puerto Rico were luckier than most countries caught up in the "demographic transition." It had an escape valve -- migration to the U.S. mainland -- which gave the island time to

introduce a vigorous program of economic and social reform and active programs to limit family size. Although the Commonwealth of Puerto Rico was transformed from widespread destitution to an economy matched by few areas of Latin America, the economic development of the island is still racing against population increase. Migration to the mainland will undoubtedly continue during the '70s, although Puerto Ricans have begun to settle in many states other than New York.

Just as with the Puerto Ricans, the in-migration of blacks to New York City is also a by-product of progress. After the end of World War II, there was a massive exodus from America's farms, one of the greatest migrations in human history. During the 1940's about 7½ million people left the farms; in the 1950's another 10 million left. This was brought about by mechanization of agriculture, improved pesticide control, advances in breeding, and more efficient management. As a result of all the technological progress, some 8 per cent of Americans on the farms were able to feed the other 92 per cent of the population -- an economic achievement that was the envy of the world. But this unparalleled national achievement forced 3 million blacks to leave Southern farms between 1940 - 1960 in search of work. Blacks who owned land tended to stay longer, but few accumulated sufficient capital to become land-owners, the few who did accumulate some capital encountered fierce white taboos against selling land to blacks. Some Southern states anticipating out-migration saw in it a further opportunity of skimping on black education. Blacks migrated to metropolitan centers in the South

and in the North, and lesser numbers to the Far West.

While this massive migration from rural regions to metropolitan centers was occuring, there was a counter-movement from the cities to the suburbs. This movement to the suburbs would not have been possible without indirect federal subsidies. The federal government and state legislatures have consistently favored suburbia to cities in highway and housing programs, and FHA has been partial to suburban housing. Perhaps 100 billion dollars has gone into highways and only a fraction into public transit.

The broad features of these two major streams of migration of black migration from the farms to metropolitan centers and the white middle-class flight to the suburbs -- can be perceived more easily by our familiar triangular plot.

The three components are the proportions who live in 1) central cities; 2) areas outside central cities, i.e., suburbs, and 3) non-metropolitan areas. Figure 2.4 depicts the residential composition of the black and white population in 1950, 1960 and 1970. By comparing the points on the graph representing the blacks in 1950 and whites in 1950 with the corresponding points in 1960, it is seen that the "distance" between whites and blacks in widening; by comparing the 1960 points with the 1970 points for blacks and for whites, it is evident that the process of geographic polarization is continuing.

Suburbanization of industry means that employment opportunities depend on transit to suburban work-places. For the black and Puerto Rican in search of work, dispersal of jobs, lack of public transit to suburban areas, and segregated housing in

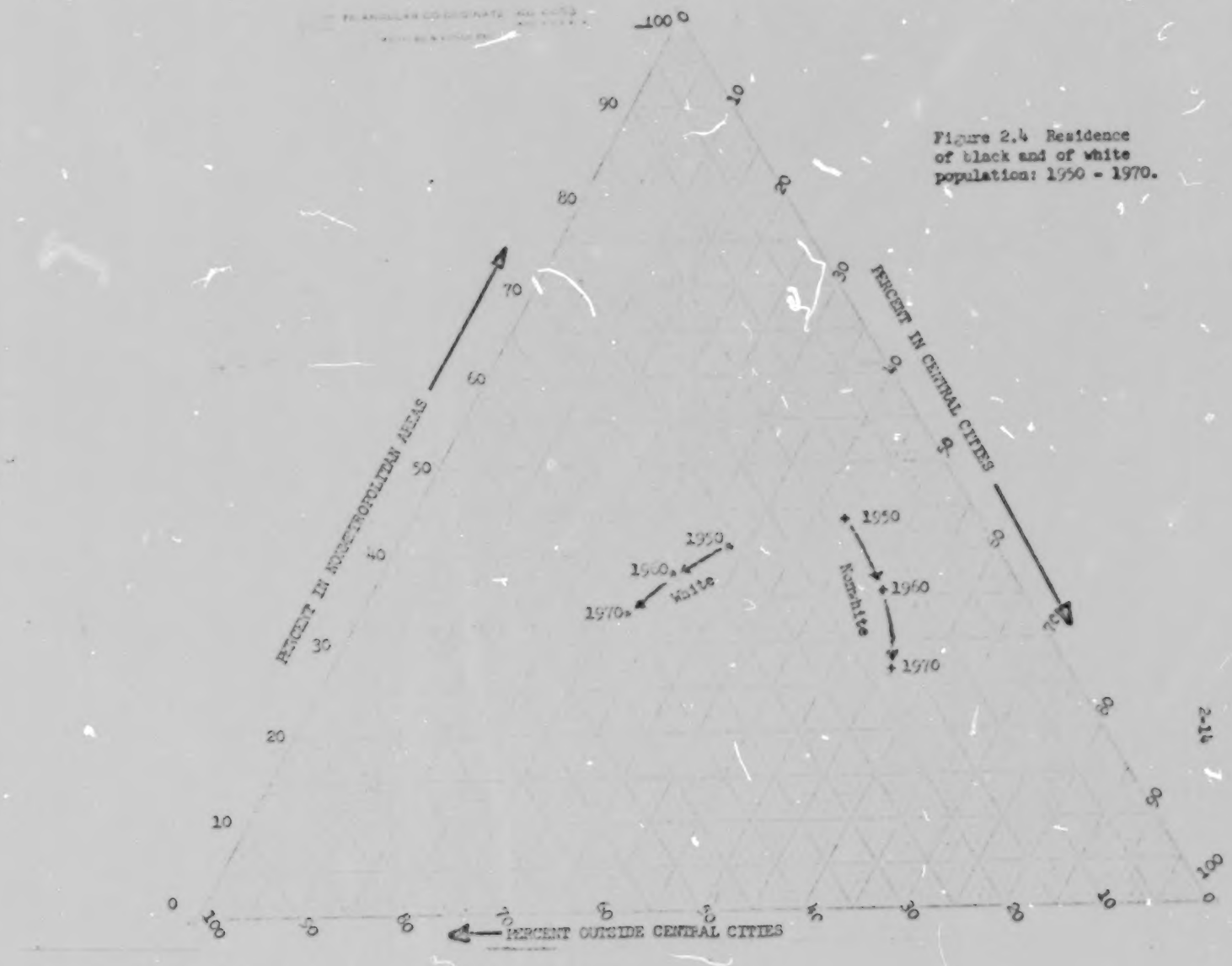

Figure 2.4 Residence of black and of white population: 1950 - 1970.

suburban areas are new barriers. These barriers prevent blacks and Puerto Ricans from translating increased education and job skills into income and occupational mobility. Multi-family housing is the only kind of housing most black workers can afford. But in the tri-state New York metropolitan region, for example, half of the vacant land zoned for residential use requires single family homes on one acre or more. And all sorts of provisions which appear to deal with housing, relating to lot sizes, sidewalk building materials, etc., are simply devices to keep out Spanish and black workers.[1]

1. John F. Kain and John R. May, "Transportation and Poverty", Public Interest, Winter 1970, 72-87; John F. Kain and Joseph J. Persky, "Alternatives to the Gilded Ghetto, Public Interest, Winter 1969, 74-87.

Though the title of this chapter is "Ethnicity and Tracking", the discussion thus far has concerned ethnicity. We now propose to connect ethnicity with curriculum placement. At the beginning of the chapter it was stated that since the inception of ethnic censuses in the New York City public schools, Fashion High always has been in the "integrated" column. But we suggested also that aggregate ethnic figures are not predictive of the interior life of a school. Christopher Jencks and his colleagues make the valid point that there is usually far more variation between students within a secondary school than between an average student in one school with an average student in another school.[1] In high schools with students of diverse ethnic or racial compositions, one can be certain that the ethnicity is related to placement in the various curricula.

In this regard, Fashion High is no exception. Detailed data on placement of the three ethnic groups appears in the Appendix. For ease of comparison the raw figures have been percentaged in Table 2.2 to show how blacks, Puerto Ricans, and whites are placed in the thirteen curricula. Wherever we must compare groups distributed in a great many nominal categories, such as Table 2.2, it is useful to have some summary measure that will tell us how similar distributions are. In the present instance, we want a measure which will indicate, for example, whether blacks or Puerto Ricans are more similar to whites with respect as curriculum assignment, and how similar blacks and Puerto Ricans

1. Christopher Jencks et al, Inequality, New York: Basic Books, 1972, p. 156f.

TABLE 2.2

CURRICULUM PLACEMENT OF HIGH SCHOOL OF FASHION INDUSTRIES GRADUATES, BY ETHNICITY: 1956 - 1963
Proportions

	Curriculum	Race-Ethnicity: Black	Puerto Rican	White
1.	Fashion Design, Technical; Females	.040	.044	.175
2.	Fashion Design; Vocational; Females	.044	.088	.088
3.	Fashion Merchandising; Vocational; Females	.021	.037	.040
4.	Fur Garment Manufacturing; Vocational; Males	.011	.009	.015
5.	Garment Operating; Vocational; Females	.383	.210	.121
6.	Interior Decorating; Vocational; Females	.026	.019	.028
7.	Men's Tailoring; Vocational; Males	.125	.095	.046
8.	Millinery Vocational; Females	.029	.021	.025
9.	Shoe Fitting; Vocational; Males	.022	.023	.022
10.	Trade Dressmaking; Technical; Females	.008	.009	.056
11.	Trade Dressmaking; Vocational; Females	.212	.362	.220
12.	Upholstery; Vocational; Males	.029	.030	.046
13.	Women's Garment Manufacturing;Vocational; Males	.051	.054	.119
	Total:	1.001	1.001	1.001
	(N)	(1104)	(569)	(605)

are placed. A measure that has proved serviceable in our analysis is called the "Index of Dissimilarity."[1] Since we will use this index in subsequent chapters it is worth some elaboration.

Algebraically, the index is expressed by the following formula:

$$\text{Index of Dissimilarity} = \sum_i \frac{\left| P_{i1} - P_{i2} \right|}{2}$$

Thus, to calculate the similarity between two distributions, we first standardize for size by percentaging each distribution calculate the absolute difference in each category, tally the differences, and divide by two. When the percentages in the two distributions are identical, the index equals zero; it reaches a maximum of 100 when the percentages are completely dissimilar.

What "completely dissimilar" means, will become evident from the following illustration, (Table 2.3) where incomes of white families are compared with that of black families in the United States.[2] The illustration will not only give the reader a better sense of what the index measures but substantively, it will provide a reading of black progress during the last twenty-five years and enable us to forecast how it will take blacks to achieve income parity.

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1. Otis Dudley Duncan and Beverly Duncan, "Residential Distribution and Occupational Stratification," American Journal of Sociology, Vol. 60, (1955), pp. 210-217.

2. Source: U.S. Bureau of the Census, Measures of Overlap of Income Distribution of White and Negro Families, U.S. Government Print-Office, Washington, D.C., 1970.

TABLE 2.3

PERCENT DISTRIBUTION OF TOTAL MONEY INCOME OF WHITE AND NEGRO FAMILIES: 1968

i	Income Category	(2) White Families	(3) Black Families	(4) $\lvert W_i - B_i \rvert$	(5) min (W_i, B_i)
1.	Under $1,000.....	1.5	3.9	2.4	1.5
2.	$ 1,000 to $ 1,499....	1.3	4.0	2.7	1.3
3.	$ 1,500 to $ 1,999....	1.6	5.1	3.5	1.6
4.	$ 2,000 to $ 2,499....	2.3	5.6	3.3	2.3
5.	$ 2,500 to $ 2,999....	2.2	5.4	3.2	2.2
6.	$ 3,000 to $ 3,499....	2.8	6.7	3.9	2.8
7.	$ 3,500 to $ 3,999....	2.6	5.6	3.9	2.6
8.	$ 4,000 to $ 4,999....	5.6	10.6	5.0	2.6
9.	$ 5,000 to $ 5,999....	6.7	8.8	2.1	6.7
10.	$ 6,000 to $ 6,999....	7.6	7.6	0.0	7.6
11.	$ 7,000 to $ 7,999....	8.3	7.2	1.1	7.2
12.	$ 8,000 to $ 8,999....	8.1	6.0	2.1	6.0
13.	$ 9,000 to $ 9,999....	7.6	4.4	3.2	4.4
14.	$10,000 to $11,000....	13.0	7.8	5.2	7.8
15.	$12,000 to $14,999....	13.2	6.2	7.0	6.2
16.	$15,000 to $24,999....	12.9	4.7	8.2	4.7
17.	$25,000 to $49,999....	2.5	0.4	2.1	0.4
18.	$50,000 and over.....	0.3	-	0.3	0.0
	Totals:	100.1	100.0	58.2	70.9
	Index of Dissimilarity =			58.2/2 = 29.1	100 - 70.9 = 29.1

Column (1) lists eighteen income categories. Columns (2) and (3) show the two distributions among white and balck families. Column (4) = Col. (2) - Col. (3) . The absolute differences total 58.2, shown at the base of column (4), and $\frac{58.2}{2}$ = 29.1, the Index of Dissimilarity.

One interpretation of the Index of Dissimilarity is that it represents the non-overlap between two percentage distributions. In the case of family income, after standardizing for the different numbers, white and black families share a common 70.9 per cent. This is shown by the middle column in the decomposition below:

Income Class	Unique to White Families	Common to Black & White Families	Unique to Negro Families
1.	-	1.5	2.4
2.	-	1.3	2.7
3.	-	1.6	3.5
4.	-	2.2	3.2
5.	-	2.8	3.9
6.	-	2.6	3.0
7.	-	5.6	5.0
8.	-	6.7	2.1
9.	-	7.6	-
10.	1.1	7.2	-
11.	2.1	6.0	-
12.	3.2	4.4	-
13.	5.1	7.8	-
14.	7.0	6.2	-
15.	8.2	4.7	-
16.	2.1	0.4	-
17.	0.3	-	-
Totals:	29.1	70.9	29.1
	• Index of Dissimilarity	= Index of Similarity	= Index of Dissimilarity

Another interpretation suggested by the decomposition above is that Index of Dissimilarity can be thought of as the smallest percentage of black families (or white families) whose income would have to change in order for the two income distributions to become congruent, in this case 29.1%.

There is an interesting simplification of the index which, to our knowledge, has gone unnoticed. Instead of taking differences between percentages, Col. (5) lists the smaller entry in each row of Column (2) and (3): $1.5 < 3.9$; $1.3 < 4.0$, etc. It turns out that an alternate form of the Index of Dissimilarity = $100 - \sum \min (p_{i1}, p_{i2})$. In Table 2.3 the sum of the minima is 70.9, and 100 - 70.9 = 29.1, the Index of Dissimilarity.[1] Therefore, instead of using the Index of Dissimilarity, we prefer to use the Index of Similarity which is obtained by summing the smaller percentage in each row:

$$\text{Index of Similarity} = \sum \min (p_{i1}, p_{i2})$$

One is less likely to make arithmetic errors by summing the smaller percentage in each row than by taking differences. So much for the methodology.

As a barometer of black vs. white family income, an Index of Similarity has been computed from 1947 to 1968. In 1947 the Index was 62.0 and as shown in Table 2.3 it rose to 70.9 by 1968. On the assumption that similarity will continue to increase at the rate of .005 per year, black families can look to the year 2,030 as the Year of Parity. Some critics have pointed out that this apparent progress is illusory, since a much higher proportion of black wives work (and work more) than white wives.

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1. The fact that the Index of Dissimilarity = $100 - \sum \min (p_{i1}, p_{i2})$ can be derived from an algebraid identity connecting the minimum of two numbers with absolute values:

$$\min (x,y) = \frac{x + y - |y - x|}{2}$$

From the identity

$$\max (x,y) = \frac{x + y + |y - x|}{2}$$

we can also derive another form of the Index of Dissimilarity:

$$\sum \max (p_{i1}, p_{i2}) - 100$$

Tooled up with our Index of Similarity, we return to Table 2.2 and compare the curriculum assignments of the three ethnic groups (Table 2.4):

TABLE 2.4

CURRICULUM SIMILARITY MATRIX
FOR THREE ETHNIC GROUPS

Ethnic Group	Blacks	Puerto Ricans	Whites
Blacks	[100]	78	65
Puerto Ricans		[100]	72
Whites			[100]

The indices suggest that blacks and Puerto Ricans were most similarly placed in the various curricula; (Index = 78); blacks and whites were least similarly placed; (Index = 65) Puerto Ricans were slightly closer to blacks than to whites (78-72) < (72-65).

Curriculum-by-curriculum comparisons reveal patterned differences in the assignment of the three groups to the various tracks. These differences persisted, except for random variation, over the eight successive years encompassed by the research. For example, in Fashion Design (Technical and Vocational Combined), the chances of being assigned were as follows:

PLACEMENT IN
FASHION DESIGN

Blacks	8%
Puerto Ricans	13%
Whites	26%

Fashion Design represents perhpas the most elite curriculum in the stratification system at Fashion High Trade Dressmaking, although not as elite as Fashion Design could be remunative and rewarding if successfully pursued, recruited more Puerto Ricans than either of the other two groups:

PLACEMENT IN
TRADE DRESSMAKING (TECHNICAL & VOCATIONAL COMBINED)

Blacks	22%
Puerto Ricans	37%
Whites	28%

Blacks trail in recruitment to Fashion Design and to Trade Dressmaking, but rank first in recruitment in possibly the least preferred track, Garment Operating:

PLACEMENT IN
GARMENT OPERATING

Blacks	38%
Puerto Ricans	21%
Whites	12%

Just as one can look at the similarity of curriculum placement for the three ethnic groups, one can look at the converse: similarity of ethnic composition among the curricula. For thirteen curricula, there are 78 similarity indices. We will not present the entire matrix, since this report does not analyze all thirteen curricula. We concentrate on the four core curricula: Fashion Design, Technical; Fashion Design, Vocational; Trade Dress-

making, Vocational; and Garment Operating. Table 2.5 below exhibits the similarity indices for the four curricula:

TABLE 2.5

ETHNIC SIMILARITY MATRIX FOR FOUR CORE CURRICULA

Curriculum	Fashion Design Technical	Fashion Design, Vocational	Trade Dressmaking, Vocational	Garment Operating
Fashion Design, Technical	[100]	74	75	51
Fashion Design, Vocational		[100]	88	63
Trade Dressmaking, Vocational			[100]	72
Garment Operating				[100]

The seventy-eight similarity indices for the curricula vary from 41 to 98, with most in the 70s or 80s. The similarity of ethnic composition between Garment Operating and Fashion Technical (51) is fourth from the bottom. The contrast in racial-ethnic composition of the two curricula are easily seen:

(Per cent)

	Fashion Design, Technical	Garment Operating
Blacks	25 %	69 %
Puerto Ricans	14	19
Whites	61	12
Total:	(100)	(100)

The minima, indicated by underscoring, total 51, the Index of Similarity shown in Table 2.5.

One must remember that at one time the vocational schools in the city were regarded as "dumping gorunds" for students with little motivation or ability. The vocational schools, however, were considerably upgraded and during the period covered by the study, the "dumping grounds" became the General Program. Before admission to Fashion High, applicants are required to pass screening tests. Nonetheless, we see that there is considerable selectivity in curriculum assignments. We did not attempt to investigate whether these assignments were validly made, nor would we be competent to make such judgments. In the sequel, their validity is assumed and we explore subsequent employment opportunities of blacks, Puerto Ricans, and whites within each curriculum.

CHAPTER 3

JOB PLACEMENT

In this chapter we examine the placement process. In particular, we want to see how curriculum is related to first job placement and how ethnicity is related to placement.

Almost all of the vocational educators with whom we have had contact judge success of vocational education by placement. This means helping graduates to find jobs that are "trade-related" or "training-related" or "curriculum related". The importance attached to this criterion is demonstrated by the facility with which vocational school principals and other administrators can produce follow-up data showing that almost all of their students go into trade-related work. Ninety per cent is a typical percentage given for curriculum related employment; and percentages as high as 98 per cent have been claimed. We will report on the placement of more than 1,000 graduates of Fashion High; what is immediately striking about the figures is the great diversity of jobs.[1] After one has seen placement figures for a school with a good reputation, such as Fashion High, one is apt to view skeptically figures of 90 per cent trade-related employment. This is not to suggest that these percentages are invented. They are based on post-card follow-up studies, usually with a high non-response rate. One cannot be sure in these surveys, when a

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1. Detailed figures on the placement of graduates of Fashion High appear in the Appendix, as well as placement figures on the graduates of Automotive High School, in Brooklyn and Gompers Vocational-Technical High School in New York.

graduate is unemployed but because of pride falsely states that he is employed or when he is employed but falsely states that he is not in the hope that the school placement office will provide a lead to a better job.

Moreover, we do not altogether agree with a criterion that scores curriculum-related employment which pays miserable wages a more successful outcome than employment which pays respectable wages though it is curriculum-unrelated. This is not an abstract criticism: later in the chapter, it will become evident that many of the better-paying jobs are curriculum-unrelated. Also, the criterion of curriculum-related employment seems clear enough intuitively but becomes fuzzier when one attempts to cast it into operational terms. Everyone knows, for example, what an auto mechanic is; it would most seem to be a major task in classification to decide whether graduates in automotive mechnaics are employed in curriculum-related work. If a graduate is working for a new car dealer and is replacing defective chasis parts, such as shock absorbers or brakeshoes or if he's doing engine tuneup, etc., classification is no problem. But when he is employed at a service station and his work consists of pumping gas, checking the oil in the crankcase and the water in the radiator and battery and to varying degrees replacing oil filters, air filters, windshield wiper blades, and tires then the relation to the automotive mechanics is not so easily determined. Every vocational school that we know of would classify auto mechanic graduates working as service station attendants as curriculum-related employment. We will not attempt to resolve this problem.

Taking a very broad view about training-related jobs, we do run into another problem which makes it difficult to evaluate outcomes of vocational education. The problem concerns the opportunity structure of the local economy, the context of placement. Suppose that vocational high schools in Washington, D.C., Boston, or Philadelphia report that 70 per cent of their dressmaking graduates enter curriculum-related work whereas Fashion High in New York City reports a much higher figure. Can we conclude that Fashion High is doing a better job in training dressmakers? To be concrete, Table 3.1 below lists eleven communities and the proportion of their labor force engaged in apparel manufacturing.

TABLE 3.1

PROPORTION OF LABOR FORCE EMPLOYED IN APPAREL MANUFACTURING*
(11 COMMUNITIES WITH VARYING PROPORTIONS)
OF LABOR FORCE IN APPAREL MANUFACTURING

Locality	Total Number of Workers	Number of Workers employed in apparel manufacturing	Proportion of Workers employed in apparel manufacturing
1. Columbus, Ohio	226,418	718	.003
2. Chicago, Ill.	2,153,423	26,408	.012
3. Los Angeles, Calif.	2,051,933	50,192	.024
4. Dallas, Texas	415,451	13,349	.032
5. San Juan, P.R.	124,165	5,105	.041
6. Philadelphia, Pa.	1,265,704	55,557	.044
7. New York City	3,742,623	275,709	.073
8. Passaic, N.J.	129,276	10,516	.081
9. Husdon County, N.J.	210,849	19,389	.092
10. Orange County, N.J.	37,107	3,990	.108
11. Rensslaer, N.Y.	27,462	3,514	.128

*Source: U.S. Bureau of the Census, County Business Patterns, 1964, New York CBP-64-34, U.S. Government Printing Office, Washington, D.C. 1965.

The gradient in the last column suggests the point of this discussion. In some localities, finding an apparel-related job for a graduate would be something of a placement achievement. It would seem to be ten times more difficult to find such a job in Columbus, Ohio than in San Juan or Philadelphia and twenty times more difficult than in New York City, or Rensslaer, New York.

In statistics, one is taught to judge the frequency of events by comparison with the ever-present rival conjecture, chance. In our study, for example, we find that a number of graduates of automotive High School find employment in the apparel industry; and some trained in electrical work at Gompers Vocational-Technical High School also start their careers in the Garment Center.[1] Considering the fact that the fashion industry is one of New York's key industries, this is not surprising. Yet when assessing placement of Fashion High graduates, ought we not credit chance with some role in the placement of graduates in the apparel industry?

Before looking at how a chance placement model might apply to the graduates of Fashion High, it is necessary to digress briefly to describe the Standard Industrial Classification Code (SIC), which we use to study placement.[2] This is a nested classification system developed by the government to classify establishments according to their principal product or economic activity. The

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1. To be specific, we estimate that 9 per cent of the graduates of Automotive High School and 10 per cent of the graduates of Gompers Vocational-Technical High are working in the apparel industry.

2. Office of Statistical Standards, Bureau of the Budget, Standard Industrial Classification Manual, 1967.

code for a particular establishment is derived from information furnished by the employer to the Social Security Administration. The first broad group is designated Divisions:

DIVISIONS

- A. Agriculture, forestry, fisheries
- B. Mining
- C. Contract Construction
- D. Manufacturing
- E. Transportation, communication, electric, gas, and sanitary services
- F. Wholesale and Retail Trade
- G. Finance, Insurance, and real estate
- H. Services
- I. Government
- J. Non-classifiable establishments

Within each Division the industries are designated Major Groups. For example, within Division D. Manufacturing, there are 21 Major Group industries; each is given a two-digit code.

Major Groups

DIVISION D. MANUFACTURING

- 19 Ordnance and accessories
- 20 Food and Kindred products
- 21 Tobacco manufacturers
- 22 Textile mill products
- 23 Apparel and other finished products made from fabrics and similar products
- . .
- . .
- . .
- 38 Miscellaneous manufacturing industries

Within Major Groups there are more detailed three-digit coded industrial classifications; each is called a Group No. Within Major Group SIC 23 (Apparel and Other Textile Products), there

are nine 3-digit coded industrial establishments:

	Group No.	
MAJOR GROUP SIC 23 (APPAREL AND OTHER TEXTILE PRODUCTS)	231	Men's and Boys' Sutis and Coats
	232	Men's and Boys' Furnishings
	233	Women's and Misses' Outerwear
	234	Women's and Children's Undergarments
	235	Hats, Caps, and Millinery
	236	Children's Outerwear
	237	Fur Goods
	238	Miscellaneous Apparel and Accessories
	239	Miscellaneous Textile Products

Finally, within each Group No., establishments are classified in even more detail with a 4-digit code. Thus, in Group No.233 (Women's and Misses' Outerwear), there are four 4-digit codes:

	Industry No.	
GROUP NO. SIC 233 (WOMEN'S AND MISSES' OUTER-WEAR)	2331	Women's and Misses' blouses and waists
	2335	Women's and Misses' dresses
	2337	Women's and misses' suits and coats
	2339	Women's and Misses' outerwear, not elsewhere classified

In this research, each graduate is classified by industry on the basis of the SIC code of his employer. Ordinarily, an employer submits quarterly reports to Social Security each quarter listing separately the name and account number of each employee and their taxable wages. Some workers during the quarter may have changed jobs or have done some moonlighting; where a worker has received wages from more than one employer, the SIC code of the employer from whom he earned the largest amount is used. The quarterly period that we have selected for the graduates of Fashion High is the second calendar quarter after graduation. (The SIC codes are not on computer tape at Social Security. Clerks must look up employer forms for the SIC codes; this operation costs more and takes more time than simply getting wages, which is on tape.)

These 4-digit SIC codes for each graduate form our basic placement data. At times, it is useful to use 2-digit codes, sometimes 3-digit codes. Because of the nominal nature of the industrial classification, several hundred 4-digit codes do pose problems in analysis. (The problems would be similar with occupational classifications; the last Dictionary of Occupational Titles listed 25,000 occupations).

An important advantage in using SIC codes is that there is a considerable body of compatible statistics for each county, city, state, and for the country at large. In fact, that is how we can relate placement at Fashion High with the New York City industrial composition, to which we now return. Table 3.2 compares graduates of Fashion High with New York City workers according to eight broad industrial divisions. The proportions in each division for Fashion High graduates and for New York City workers is shown in the table. Fashion High sent 52.3 per cent of its graduates into Division D., Manufacturing; New York City's labor force in Manufacturing totals 31.2 per cent.

As far as our chance placement model is concerned, the last column of Table 3.2 is most revealing: the figure 1.68 is equal to the ratio of .523/.312. If placement were governed purely by chance, the expected ratio would be 1.00 The fact that it is 68 per cent above chance tells us something about the system of placement and manufacturing. Division F, Wholesale and Retail Trade recruited 31 per cent of Fashion High's graduates, whereas the city's labor force includes only 25.1 per cent: hence the last column shows 1.24, 24 per cent above chance. The other ratios are less than 1.00 and consequently less than chance.

TABLE 3.2

PLACEMENT OF HIGH SCHOOL OF FASHION INDUSTRIES GRADUATES (1956-1963)
AND
DISTRIBUTION OF WORKERS IN NEW YORK CITY (1959)[1]

SIC DIVISION	HSFI Graduates		NYC Workers		Column A/Column B
	Number	Proportion (A)	Number	Proportion (B)	
D. Manufacturing	734	.523	922,403	.312	1.68
F. Wholesale & retail trade	435	.310	742,900	.251	1.24
H. Services	119	.085	544,663	.184	0.46
E. Transportation, other public utilities	43	.031	254,675	.086	0.36
G. Finance, insurance, real estate	60	.043	378,200	.128	0.34
C. Contract construction	11	.008	111,436	.038	0.21
A. Agriculture	---	.000	912	.0003	0.00
B. Mining	---	.000	2,250	.0008	0.00
TOTAL:	(1402)	(1.000)	(2,957,439)	(1.0001)	

1. U.S. Bureau of the Census and U.S. Bureau of Old-Age and Survivors Insurance, cooperative report, County Business Patterns, First Quarter 1959. Part 3A, Middle Atlantic States (New Jersey, New York), U.S. Government Printing Office, Washington, D.C., 1961.

Table 3.3 shows the distributions of graduates according to the Major Groups, the 2-digit industrial codes. Note that of the 67 industries, at least one graduate from Fashion High was recruited by 50 of them. The industries are rank-ordered according the magnitude of the ratio shown in the last column. Although we were not surprised in Table 3.2 that Manufacturing recruited the big share of graduates relative to local labor market, we might not have been able to predict that SIC 23 (Apparel and other textile products) ranks second to SIC 56 (Apparel and Accessory Stores), one of the Major Groups under Division F. Wholesale and Retail Trade. True, 565 graduates found work in apparel Manufacturing (SIC 23) while only 176 found work in apparel and accessory stores, but by chance we would have expected four times as many graduates to go into SIC 23 than SIC 56.

During the 1960s, the number of workers in the apparel industry in New York City declined by about 65,000. The jobs that the city lost in the apparel industry probably were the more repetitive, lower-paid factory jobs. A fortuitous by-product of changes in the New York economy may mean that black and Puerto Rican graduates from Fashion High will find more employment in better-paying department stores, variety stores, and in retail apparel and accessory stores rather than in apparel manufacturing.

By examining placement in the context of the local economy, one gets more insigth into the placement process. Had we looked at placement of Fashion High Graduates without considering the opportunity structure, we might have given much greater emphasis to SIC 50 (Wholesale Trade), for example which recruited 5 per

TABLE 3.3

PLACEMENT OF HIGH SCHOOL OF FASHION INDUSTRIES GRADUATES (1956-1963)
AND
DISTRIBUTION OF WORKERS IN NEW YORK CITY (1959)[1]

	SIC Code	Description of Major Group	HSFI Graduates No.	HSFI Graduates Proportion (A)	NYC Workers Proportion (B)	Column A/ Column B
1.	56	Apparel & accessory stores	176	.126	.0218	5.76
2.	23	Apparel & other textile products	565	.403	.0940	4.29
3.	53	Retail gen'l merchandise	135	.096	.0227	4.24
4.	22	Textile mill products	36	.026	.0107	2.40
5.	31	Leather & leather products	29	.021	.0106	1.95
6.	25	Furniture & fixtures	12	.009	.0066	1.31
7.	30	Rubber & plastic products	5	.004	.0033	1.08
8.	39	Misc. manufacturing industries	31	.002	.0211	1.05
9.	72	Personal services	26	.018	.0209	.88
10.	76	Misc. repair services	4	.003	.0034	.83
11.	57	Furniture & home furnishings	7	.005	.0060	.83
12.	48	Communications	31	.022	.0267	.83
13.	26	Paper & allied products	10	.007	.0090	.79
14.	61	Credit agencies other than banks	4	.003	.0039	.73
15.	80	Medical & other health services	28	.020	.0305	.66
16.	73	Misc. business services	36	.026	.0407	.63
17.	82	Educational services	6	.004	.0084	.48
18.	50	Wholesale trade	76	.054	.1078	.50
19.	59	Misc. retail stores	10	.007	.0146	.49
20.	67	Holding & investment companies	2	.001	.0030	.48
21.	36	Electrical equipment & supplies	11	.008	.0167	.47
22.	60	Banking	16	.011	.0256	.44
23.	54	Food stores	14	.010	.0228	.44
24.	63	Insurance carriers	19	.014	.0311	.44
25.	15	Gen'l bldg contractors	4	.003	.0072	.40
26.	49	Electric, gas & sanitary services	5	.004	.0097	.37
27.	24	Lumber & wood products	1	.001	.0020	.36
28.	47	Transportation services	3	.002	.0060	.36
29.	27	Printing & publishing	19	.014	.0409	.33
30.	64	Ins. agents, brokers & service	3	.002	.0088	.31
31.	78	Motion picutres	3	.002	.0069	.31
32.	81	Legal services	3	.002	.0070	.30
33.	52	Bldg. materials & farm equipment	1	.001	.0024	.29
34.	65	Real estate	15	.011	.0371	.29
35.	38	Instruments & related products	3	.002	.0076	.28
36.	79	Amusement & recreational services	3	.002	.0078	.28
37.	58	Eating & drinking places	15	.011	.0398	.27
38.	89	Misc. services	5	.004	.0136	.26
39.	32	Stone, clay & glass products	1	.001	.0027	.26
40.	34	Fabricated metal products	5	.004	.0141	.25

	SIC Code	Description of Major Group	HSFI Graduates No.	HSFI Graduates Proportion (A)	NYC Workers Proportion (B)	Column A/ Column B
41.	17	Special trade contractors	7	.005	.0259	.19
42.	42	Trucking & warehousing	3	.002	.0127	.17
43.	28	Chemicals & allied products	2	.001	.0088	.16
44.	35	Machinery except electrical	2	.001	.0089	.16
45.	86	Nonprofit membership organizations	4	.003	.0224	.13
46.	55	Auto dealers & service stations	1	.001	.0068	.10
47.	45	Transportation by air	1	.001	.0094	.08
48.	20	Food & kindred products	2	.001	.0242	.06
49.	70	Hotels & other lodging places	1	.001	.0153	.05
50.	62	Security & commodity brokers	1	.001	.0158	.04
51.	44	Water transportation	0	---	.0107	.00
52.	29	Petroleum & coal products	0	---	.0007	.00
53.	19	Ordnance & accessories	0	---	.0005	.00
54.	33	Primary metal industries	0	---	.0031	.00
55.	37	Transportation equipment	0	---	.0034	.00
56.	16	Heavy construction contractors	0	---	.0038	.00
57.	75	Auto repair, services & garages	0	---	.0044	.00
58.	41	Local & interurban transit	0	---	.0097	.00
59.	66	Combined real estate ins., etc.	0	---	.0008	.00
60.	84	Museums, botanical gardens, zoos	0	---	.0008	.00
61.	07	Agricultural services & hunting	0	---	.0002	.00
62.	21	Tobacco manufacturers	0	---	.0002	.00
63.	10	Metal mining	0	---	.0001	.00
64.	13	Oil & gas extraction	0	---	.0001	.00
65.	09	Fisheries	0	---	.0000	.00
66.	14	Nonmetalic minerals except fuels	0	---	.0001	.00
67.	46	Pipeline transportation	0	---	.0001	.00

U.S. Bureau of the Census and U.S. Bureau of Old-Age and Survivors Insurance, cooperative report, County Business Patterns, First Quarter 1959, Part 3A Middle Atlantic States (New Jersey, New York), U.S. Government Printing Office, Washington, D.C., 1961.

cent of the graduates from Fashion High. Insofar as 10 per cent of the city's labor force are in wholesale trade, it does not seem that the 5 per cent is any achievement in placement. In any event, one single summary figure stating the percentage of graduates who go into curriculum-related work is not terribly informative.

Two factors that affect placement in manufacturing can be readily identified: one is curriculum, the other ethnicity. The upper panel of Figure 3.1 shows graphically the proportion of black and Puerto Rican graduates in the four core curricula whose first job is with a manufacturing firm; the lower panel shows the corresponding proportions for whites. Of the four curricula Garment Operating leads manufacturing employment (72 per cent of the black/Puerto Rican Garment Operators; 39 per cent of white Garment Operators). Second is Trade Dressmaking (60 per cent of black/Puerto Rican Dressmakers; 20 per cent of the whites). Third and fourth are Fashion Design, Vocational (55 per cent black/Puerto Ricans; 26 per cent whites) and Fadhion Design, Technical (29 per cent black/Puerto Ricans; 21 per cent whites). Placement in manufacturing thus depends both on curriculum and on ethnicity: the odds are considerably greater for a Garment Operator to go into manufacturing than a Fashion Designer and twice as great for a black than a white, regardless of curriculum. Since whites are less likely to go into manufacturing there must be other industries where they are more likely to go into!

Fig. 3.2,which in a way is the complement of Figure 3.1, shows that whites are more likely to go into wholesale and retail firms:

FIGURE 3.1

PROPORTION OF GRADUATES PLACED IN MANUFACTURING,
BY CURRICULUM AND ETHNICITY

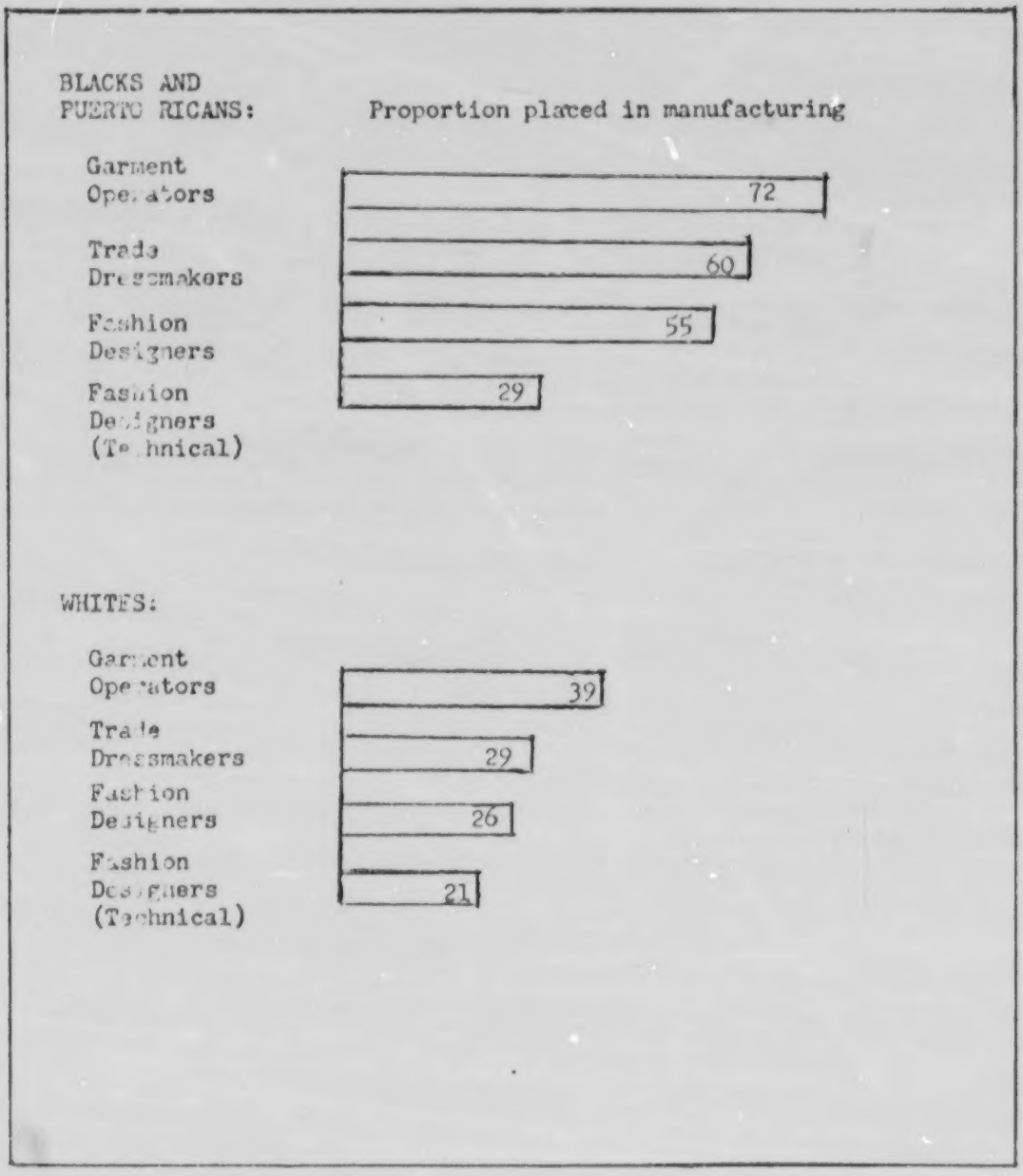
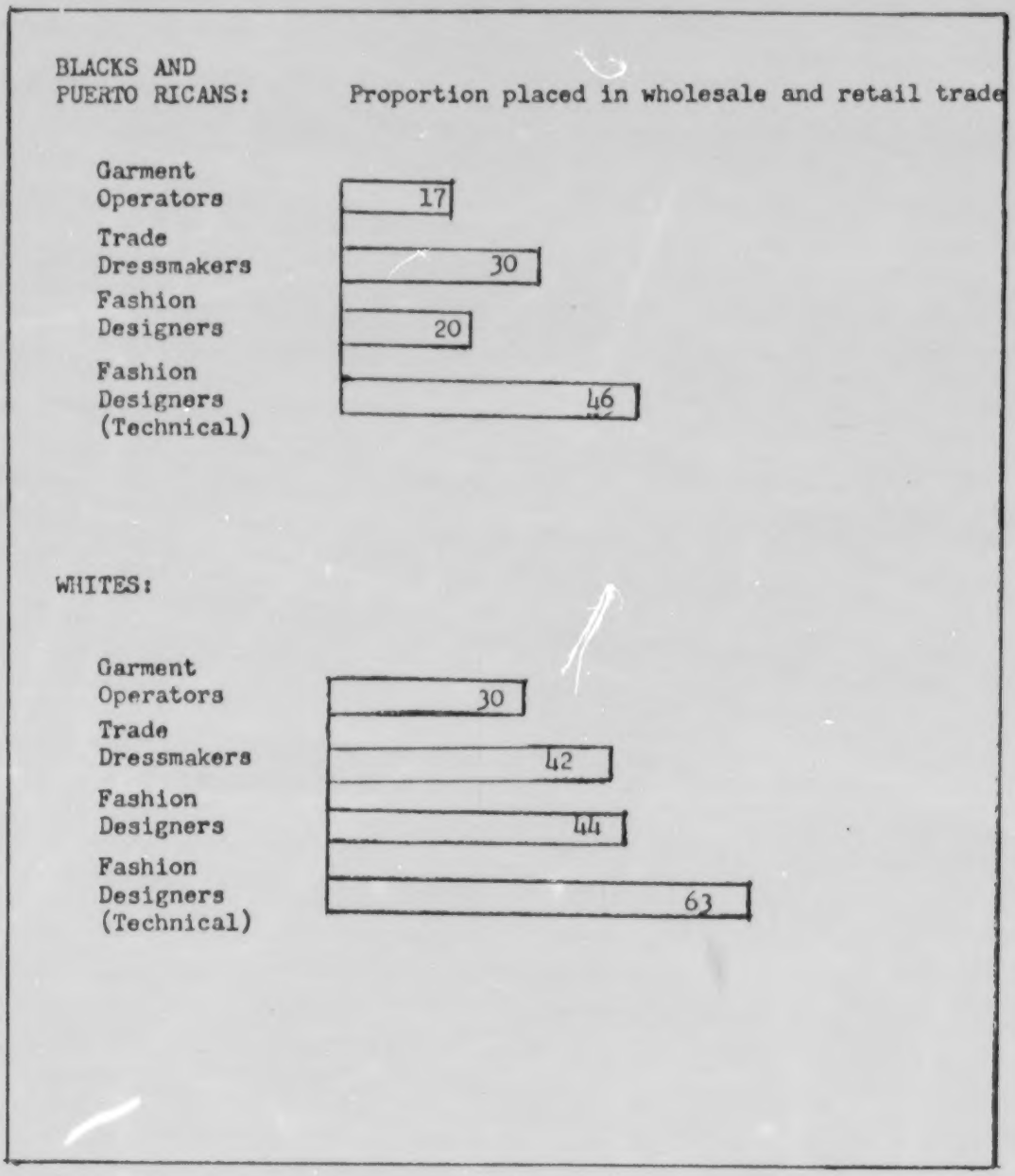


FIGURE 3.2

PROPORTION OF GRADUATES PLACED IN WHOLESALE AND RETAIL TRADE,
BY CURRICULUM AND BY ETHNICITY



blacks and Puerto Ricans are less likely, whatever the curricula. Of the four curricula, Garment Operators are least likely to find jobs in wholesale and retail trade and Fashion Designers are most likely.

It is worth digging more deeply into the placement process. The reader will recall the discussion in the previous chapter regarding the similarity between distributions of percentages. It was shown that when the two distributions are listed into two columns an Index of Similarity can be obtained by totalling the smaller percentage in each row. Table 3.4 shows the placement of graduates by broad industrial division according to the curriculum and race-ethnicity of graduates. Column 1 of the table refers to black/Puerto Rican Garment Operators and Column 2 to white Garment Operators. The percentages in the two columns are listed below, the smaller percentage in each row is starred; the total of starred entries is .66, the Similarity Index for black/Puerto Rican vs. white Garment Operators. For black/Puerto Rican Trade Dressmakers vs. white Trade Dressmakers the Index of Placement Similarity is .70.

Division	Garment Operators		Trade Dressmakers	
	Black/Puerto Rican	White	Black/Puerto Rican	White
D;C	.72	.39*	.60	.29*
F	.17*	.30	.30*	.42
G;I	.03*	.08	.01*	.16
E	.02*	.08	.03*	.04
H	.05*	.15	.07*	.08
	Similarity Index = .66		Similarity Index = .70	

Note that these two indices mean within curriculum - between ethnicity. By exchanging columns, we get similarity measures for within ethnicity - between curricula [columns 1 vs. 3, and columns 2 vs. 4 of Table 3.4]:

	Black/Puerto Rican		White	
Division	Garment Operating	Trade Dressmaking	Garment Operating	Trade Dressmaking
D;C	.72	.60*	.39	.29*
F	.17*	.30	.30*	.42
G;I	.03	.01*	.08*	.16
E	.02*	.03	.08	.04*
H	.05*	.07	.15	.08*
	Similarity Index = .85		Similarity Index = .79	

The latter two indices both are greater than the former two, indicating that greater similarity within ethnicity - between curricula than within curricula - between ethnicity, that is, recruitment depends more on race - ethnicity than on vocational training. One value of studying outcomes of vocational education, rather than of college or professional education is that the early entry in the labor market enables us to observe more clearly and more rapidly the nature of the social stratification system. These four simple indices suggest that after graduates are placed in their first job they will make a sociological discovery: co-workers tend to be of the same race-ethnicity to a greater extent than they were at Fashion High.

Let us dig still more deeply into the placement process. We already have noted that blacks and Puerto Ricans are more likely to be placed (or to be recruited) into manufacturing which we treated as a broad, homogeneous grouping. We direct our attention to one sector of manufacturing, mainly, SIC 23 (apparel manufacturing),

TABLE 3.4

SIC CLASSIFICATION OF GRADUATES FOUR-TO-SIX MONTHS AFTER HIGH SCHOOL GRADUATION
BY CURRICULUM AND BY ETHNICITY

SIC CODE	Primary Activity of Firm	CURRICULUM: Garment Operating		Trade Dressmaking		Fashion Design		Fashion Design Technical		Total	
		Black & PR	White	Black & PR	White	Black & PR	White	Black & PR	White	Black & PR	White
D-C	Manufacturing; Contract Construction	.72	.39	.60	.29	.55	.26	.29	.21	.63	.29
F	Wholesale & Retail Trade	.17	.30	.30	.42	.20	.44	.46	.63	.24	.44
G-I	Finance, Insurance, Real Estate; Government	.03	.08	.01	.16	.05	.09	.07	.05	.03	.11
E	Transportation, Other Public Utilities	.02	.08	.03	.04	.09	.07	.02	.04	.03	.05
H	Service Industries	.05	.15	.07	.08	.12	.14	.15	.07	.07	.10
	Total:	.99	1.00	1.01	.99	1.01	1.00	.99	1.00	1.00	.99
	Number:	(351)	(61)	(292)	(106)	(66)	(43)	(41)	(57)	(750)	(267)
	Employed, SIC Unknown	22	12	22	18	2	--	1	10	47	40
		(373)	(73)	(314)	(124)	(68)	(43)	(42)	(67)	(797)	(307)

the industry central to this research; Table 3.5 provides the raw material for similarity indices within the apparel manufacturing industry. As a preface, it is useful to indicate that important consideration in SIC 23 placement is whether the firm manufactures outerwear or undergarments and nightwear. Ms. coats and dresses are dictated by fashion. Each manufacturer's goal is to anticipate what fabrics and silhouettes and colors and details will be fashionable during the forthcoming season. Will skirts get shorter? Necklines creep down? Sleeves become tighter? Will belts get wider or narrower? Will they be of matching or contrasting material? Will collars be wide or narrow? Every manufacturer is trying to score a coup by coming out first with a "hot number." Outerwear is highly attuned to annual style changes. As a consequence, greater adaptability on the part of workers is required; the work however, is more interesting and the pay is higher. Constrastingly undergarments yield to changes in fashion more slowly. Not many women discard pajamas because the neckline isn't low enough or round instead of square. Undergarment production is less style-oriented, demand is more stable, work is more routinized, and pay is usually less than for women's coats and dresses.[1]

Keeping this in mind, we can now examine line 1 of Table 3.5, which refers to SIC 233, Women's, Misses', and Juniors' Outerwear. In Trade Dressmaking, Garment Operating, and Fashion Design, (Technical), whites are considerably more likely to be recruited than

1. For a discussion of the women's apparel industry in New York, see Max Hall (ed.), Made in New York, Cambridge, Mass.; Harvard University Press, 1959.

TABLE 3.5

SIC CLASSIFICATION OF GRADUATES EMPLOYED IN APPAREL AMNUFACTURING,
BY CURRICULUM AND BY ETHNICITY

(Four-to-six months after high school graduation)

SIC CODE	Primary Activity of Firm	CURRICULUM: Garment Operating		Trade Dressmaking		Fashion Design		Fashion Design Technical	
		Black & PR	White	Black & PR	White	Black & PR	White	Black & PR	White
233	Women's Outerwear	.18	.38	.27	.53	.58	.46	.30	.86
234	Women's Undergarments	.44	.25	.11	.21	.12	.27	.10	--
236	Girls, Children's Outerwear	.10	.19	.20	.11	.12	.18	.10	.14
239	Misc. Textile Products	.15	--	.23	--	.08	--	.10	--
238	Misc. Apparel	.08	.06	.06	--	.08	--	.30	--
235	Millinery	.02	.06	.05	--	--	--	.10	--
231	Men's Outerwear	.01	.06	.06	.16	.04	--	--	--
232	Men's Furnishings and Work Clothes	.02	--	.01	--	--	.09	--	--
237	Fur Goods	.01	--	--	--	--	--	--	--
230	Apparel Manufacturing, n.e.c.	--	--	.01	--	--	--	--	--
	TOTAL: (NUMBER)	1.01 (198)	1.00 (16)	1.00 (143)	1.01 (19)	1.02 (26)	1.00 (11)	1.00 (10)	1.00 (7)

are blacks or Puerto Ricans, holding constant vocational training received at Fashion High. In the Men's Outerwear industry (SIC 231), we observe also that whites are more likely to be recruited; there too, earnings are likely to be higher.

We now are ready to report the similarity indices within the apparel manufacturing industry, this time foregoing the detailed calculations:

	Similarity Index
WHITES:	
Garment Operators vs. Trade Dressmakers	.76
BLACKS & PUERTO RICANS:	
Garment Operators vs. Trade Dressmakers	.64
GARMENT OPERATORS	
Blacks/PRs vs. whites	.62
TRADE DRESSMAKERS	
Blacks/PRs vs. whites	.58

Again we find that similarity is greater within ethnic groups than within curriculum. Our interest is more in the direction than the magnitude of the indices. We intrepret the differences in indices to mean that apparel manufacturing firms, like firms in other industries recruit graduates more on the basis of race-ethnicity than vocational training. No doubt graduates will perceive soon after entry into the labor market that they are in an ethnically more homogeneous environment than they were in at Fashion High.

On the basis of the Social Security work-history data together with study of the Bureau of Labor Statistics cross-classification of occupations and industries, we have classified nine SIC codes as training-related:

SIC Codes	Description of Industry
23	Apparel and Other Textile Products
503	Dry Goods and Apparel - Wholesale
56	Apparel and Accessory Stores
53	Retail Trade - General Merchandise
22	Textile Mill Products
31	Leather and Leather Products
25	Furniture and Fixtures
727	Garment Pressing, Alternation, & Repair
30	Rubber and Plastic Products

We will attempt to see which graduates went into training-related work, as defined here, and what consequences it had in terms of earnings and employment. To simplify the exposition, we will examine the two main trades, Garment Operating and Trade Dressmaking.[1] Table 3.6 below, cross-classifies ethnicity with curriculum and for each sub-group furnishes the proportion whose employment was training-related:

1. A detailed table containing data on Fashion Design appears in the Appendix.

TABLE 3.6

PROPORTIONS OF GRADUATE TRADE DRESSMAKERS AND GARMENT OPERATORS EMPLOYED IN TRADE-RELATED WORK, BY ETHNICITY
(Second calendar quarter after graduation)

Race-Ethnicity	Curriculum	Proportion employed in training-related work
Black/Puerto Rican	Trade Dressmaking	.76
Black/Puerto Rican	Garment Operating	.70
White	Trade Dressmaking	.54
White	Garment Operating	.48

How much difference did curriculum make? Holding constant the ethnic group of graduates, we compare Trade Dressmakers with Garment Operators:

Race-Ethnicity	Curriculum	Proportion in training-related work	
Black/Puerto Rican	Trade Dressmaking	.76	Difference = .06
Black/Puerto Rican	Garment Operator	.06	
White	Trade Dressmaking	.54	Difference = .06
White	Garment Operator	.48	

Effect of curriculum = .06

How much difference did ethnicity make? About three times as much.

Trade Dressmaking	Black/Puerto Rican	.76	Difference = .22
Trade Dressmaking	White	.54	
Garment Operating	Black/Puerto Rican	.70	Difference = .22
Garment Operating	White	.48	

Effect of Ethnicity = .22

Here we have a paradoxical result. At Fashion High, whites were given the choice curriculum assignments but are least likely to remain in the Apparel industry. In the next chapter when we get into money matters, we will get some insight into why whites defect from the Apparel industry. As far as Puerto Ricans and blacks are concerned we have combined them in the analysis above. Actually Puerto Ricans tend to go into trade-related employment two or three per cent more than blacks, but for economy of communication have not exhibited the small variations.

Before considering one other aspect of placement, it may be of interest to report the proportion of graduates who enter trade-related work, as we have defined it. Of 1100 graduates in the four core curricula, 737 were employed in firms whose SIC was one of the nine listed above: this gives a figure of 67 per cent employed in training-related work. This is about what we have come to expect of good vocational schools. Figures of 90 per cent trade-related placement, particularly in multi-trade vocational schools, should be regarded with skepticism.

One aim motivating this research was the conviction that vocational schools had little feedback concerning the fate of the students who satisfactorily completed their training, and that a quick, inexpensive, and reliable follow-up system could be evolved for them to learn about the employment, industry, and earnings of their alumni. Much of the cost, time, and effort in this study went into laboriously transcribing a few identifying background characteristics of students from high school records. Social Security then did a computer search for individuals who

matched each profile in order to get the Social Security number of graduates. Given a student's name, birthday, birthplace, parents' names and birthplages, race, and sex, the account number was found, in almost all cases. Many schools now record the SSA number of students. With the account numbers in the records together with a few other items, such as curriculum, graduating class, sex, etc. it would not be difficult or costly to provide labor market information on vocational school graduates.

The analysis so far has been from the perspective of the graduate searching for employment. One could take the complementary point of view, namely, establishments in various industries searching for recruits. One matter of concern is whether recruitment in various industrial sector is influenced by ethnicity. We consider first the broad industrial divisions: Manufacturing; Transportation; Communication, electric, gas and sanitary services; Whloesale and Retail Trade; Finance, insurance, and real estate; Services.[1] We also restrict our inquiry to Trade Dressmaking, since it is neither at the bottom nor at the top of curriculum status system; it contains the nearest to parity of the three ethnic groups.

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1. Most of the division titles are suggestive but for the reader who is unfamiliar with SIC codes, Services includes establishments primarily engaged in rendering a wide variety of services to individuals and to business establishments. Examples are: Hotels and other lodging places; medical, legal, engineering, and professional services; educational institutions; nonprofit organizations; advertising agencies, employment agencies; auto repair shops, furniture repair; race tracks; golf clubs; etc.

Given three groups, the simplest way to get some overall sense of the recruitment process is by plotting the figures on triangular graph paper. The ethnic composition of the graduates recruited by the broad industrial divisions appears in Fig. 3.3. Below the center of the equilateral triangle is a small circle marked "TD": that circle characterizes the ethnic composition of Trade Dressmaker graduates: 36 per cent black, 36 per cent Puerto Rican and 28 per cent white. If recruitment operated so that ethnicity was an irrelevant criterion in employment, then the industrial divisions should be clustered around the TD centroid. However, the points representing the industrial divisions appear to be over-dispersed. Close to the vertex labelled "100% white" is division G, Finance, Insurance, and Real Estate: almost all of its recruits were white. Perhaps some of the vocational educators or instructors at Fashion High may experience some sense of failure because these graduates were employed in insurance and hence unrelated to training. But it is not without redeeming aspects. For one thing, their employment counters the argument of some critics of vocational education who argue that occupational opportunities are narrowed too early. Actually, the training acquired in vocational school is neither that intensive nor specialized so as to preclude employment in a great variety of other types of jobs nor are most jobs that demanding. True, employers ask for more educational credentials than they used but this is more because of the supply of more educated workers than the technological need. Most employers recognize that a graduate who had enough motivation and discipline to complete a vocational program is trainable for other work, Anyone who has

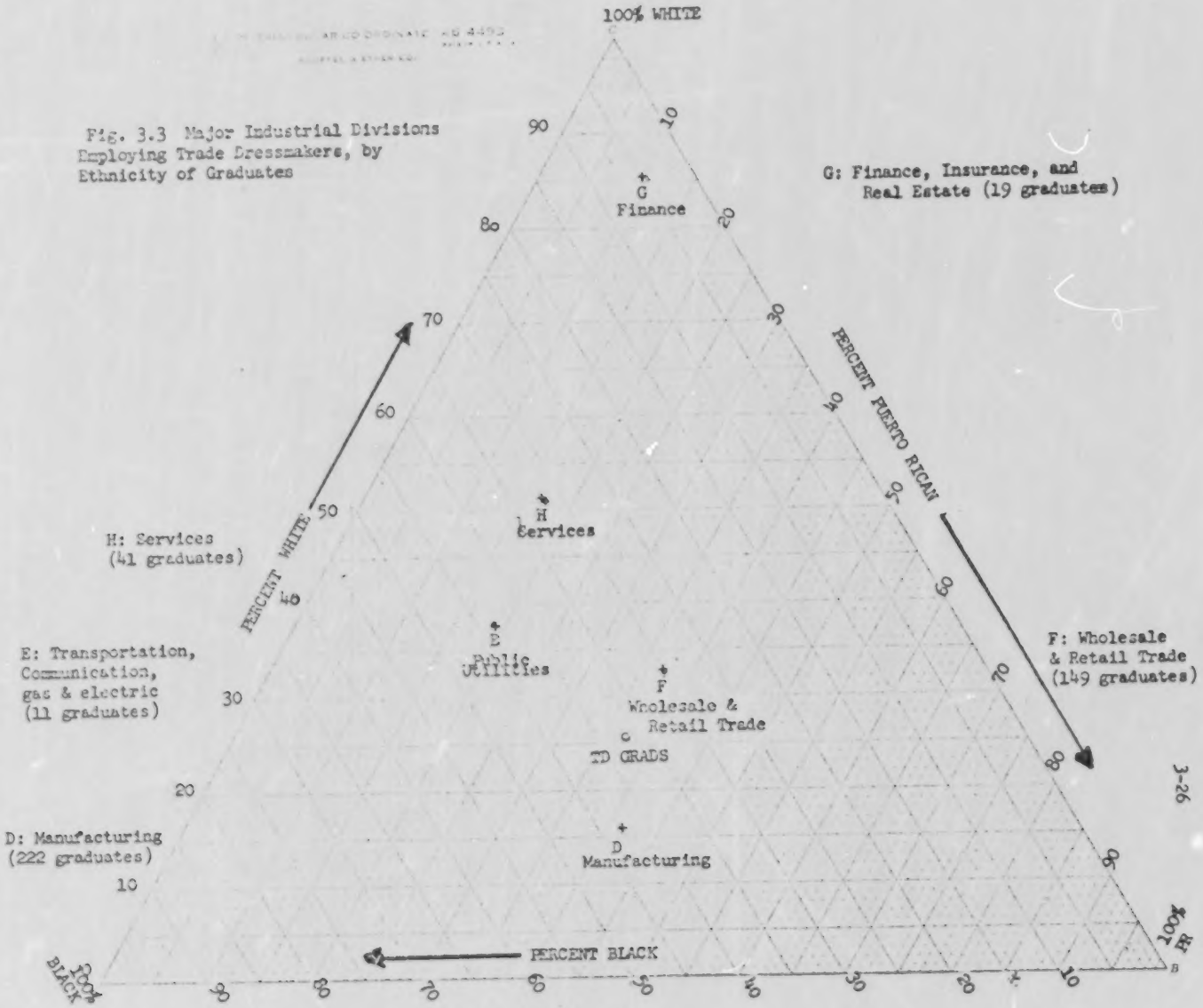

Fig. 3.3 Major Industrial Divisions Employing Trade Dressmakers, by Ethnicity of Graduates

been in the military service has observed the rapidity that ordinary people can be trained to fly airplanes, to cook food, to fix trucks, to perform medical services, to serve as a policeman, to use communications equipment, and occasionally to operate 50 calibre machine-guns or 3-inch guns.

The points on the triangle above the TD-circle indicate that the designated industries recruited more whites than expected. Division H, Services, recruited nearly twice as many whites as expected; Division E, Public Utilities exceeded the expected proportion; Division F, Wholesale and Retail, recruited slightly more than the expected proportion of Puerto Ricans and whites. Division D, Manufacturing, which is below the TD-centroid, shows a deficit of whites: instead of an expected 26 per cent, only 16 per cent were recruited.

More details about industrial recruitment are shown in Fig. 3-4. Industries which hired five or more graduates (using only two-digit code SIC's) are plotted. In all, there were thirteen such industries. The other industries which hired 1, 2, 3, or 4 graduates are consolidated into a residual category "All Others," designated on the graph as "AO." The AO industry shows a surplus of whites. Inspection of Fig. 3-4 suggests some over-dispersion of the industries. To check our visual impression, we carried out a chi-square test for the divisions listed in Table 3-7 below. (The cell-sizes are larger for the major industrial divisions).

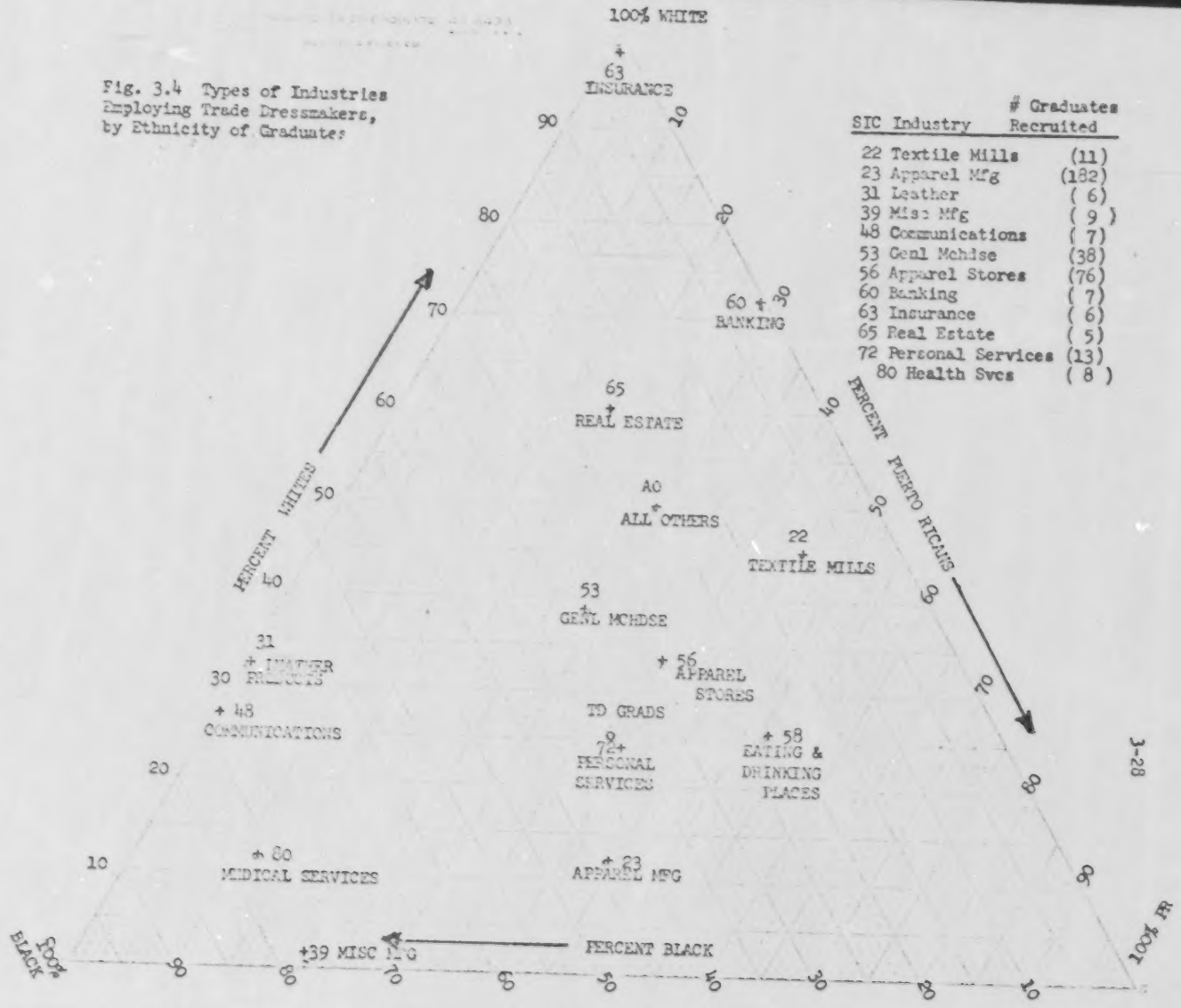

Fig. 3.4 Types of Industries Employing Trade Dressmakers, by Ethnicity of Graduates

SIC	Industry	# Graduates Recruited
22	Textile Mills	(11)
23	Apparel Mfg	(182)
31	Leather	(6)
39	Misc Mfg	(9)
48	Communications	(7)
53	Genl Mchdse	(38)
56	Apparel Stores	(76)
60	Banking	(7)
63	Insurance	(6)
65	Real Estate	(5)
72	Personal Services	(13)
80	Health Svcs	(8)

TABLE 3-7

ETHNIC COMPOSITION OF GRADUATES RECRUITED BY INDUSTRIAL DIVISIONS
(Second quarter after graduation from High School)

Major Industrial Division	Ethnicity			
	Black	Puerto Rican	White	Total
D. Manufacturing	96	92	34	(222)
E. Transportation etc.	5	2	4	(11)
F. Wholesale and Retail Trade	44	55	50	(149)
G. Finance, Insurance & Real Estate	1	2	16	(19)
H. Services	13	7	21	(41)
Totals:	159	158	125	(442)
Proportions:	(.360)	(.357)	(.282)	(1.000)

The calculated chi-square of 58.37 exceeds the critical value at the .001 level (21.96), leading us to reject the independence of the two factors and to conclude that recruitment to various industries is dependent on the ethnicity of the graduates.

We intrepret these results to mean that a great many of the graduates leave an ethnically intregrated high school and go to working environments which are less integrated. It should not be thought that this pattern is unique to Fashion High graduates or to the apparel industry. It is a national pattern discussed by Paul M. Siegel in his classic paper "On the Cost of Being a Negro."[1]

1. Sociological Inquiry 35 (1965), 41-57.

Paul M. Siegel employed an index of dissimiliarity between white and nonwhite occupational distributionsfor males 25-64 in the United States, for 1950 and 1960. He uncovered a small reduction in occupational segregation over the decade but what is most interesting and relevant here was his finding that the highest indices of occupational dissimilarity occur at about the ages when youths graduate from high school or during the first year of two of college -- the very levels which blacks are reaching in large numbers for the first time and represented by Fashion High graduates. Siegel's data covered aggregate occupational data for the country. Here we get a glimpse of how this process operates with graduates who pursued the same curriculum in high schools, who were trained for the same industry and who entered the same labor market. A considerable amount of occupational and industrial disperson takes place within four-to-six months after graduation from high school.

CHAPTER 4

THE FIRST JOB AFTER GRADUATION

We have seen at Fashion High, that the tracking of Puerto Ricans, blacks, and whites into preferential curricula is related to their ethnicity. Whites are far more likely to be placed in more elite curricula -- Fashion Design and Trade Dressmaking, for example, -- whereas blacks and Puerto Ricans are over-represented in the least attractive curriculum, Garment Operating.

Whatever the bases for selective tracking in this vocational high school, for purposes of analysis let us accept curriculum placement as given and examine the role of ethnicity within each curriculum after graduation. Specifically, we will compare changes in earnings from the first calendar quarter after graduation to the second quarter. Usually economic mobility is studied inter-generationally; when it is studied intra-generationally, it would usually cover a considerably longer period. The significance of comparing mobility rates for such a short interval is not so much the actual dollars and cents involved but the insight it sheds on the process of occupational success for whites and for blacks. It is scarcely exaggeration to say that on the first day in the labor market, whites already hold the lead -- within each curriculum.

To replicate some results of the economist Lowell Gallaway,[1] who also used Social Security work-history data to analyze dif-

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1. Lowell E. Gallaway, "The Anatomy of the Negro-White Income Differential," in Herbert E.Northrup and Richard L. Rowan, (eds.), The Negro and Employment Opportunity (Bureau of Industrial Relations, Graduate School of Business, University of Michigan, 1965), pp. 45-64; Lowell E. Gallaway, "The Negro and Poverty," The Journal of Business, XL (January, 1967), pp. 27-35.

ferentials in white-black earnings, we have categorized graduates into "low" and "high" earners, depending on whether their earnings during the first quarter after graduation exceeded the all-graduate median of $470. Before looking at the first-to-second quarter changes, let us see the extent of differences for the first quarter. Table 4.1, below, shows appreciable differences.

TABLE 4.1

PROPORTION OF GRADUATES WITH EARNINGS ABOVE MEDIAN IN FIRST QUARTER AFTER GRADUATION, BY ETHNICITY AND BY CURRICULUM

	Ethnicity			
	White	Puerto Rican	Black	Proportion for Curriculum
Fashion Design	.43	.33	.24	(.34)
Trade Dressmaking	.40	.36	.25	(.33)
Fashion Design - Technical	.29	----.28------- *		(.28)
Garment Operating	.31	.31	.16	(.21)

* Puerto Rican and Black Combined

Whites trained in Fashion Design, Trade Dressmaking, and Garment Operating are more likely to be in the "high" income category than blacks. For example, among the Fashion Designers (row 1 of table 4.1) 43 per cent of the whites are classified as "high-earners" but only 24 per cent of the blacks. Puerto Ricans tend to earn more than blacks but less than whites.

The one exception to the general pattern occurs in the third row of table 4.1 referring to Fashion Design (Technical). Ethnicity appears to have little effect on earnings: Whites are as likely as

blacks to earn more than the median of $470. Fashion Design (Technical) is the most prestigious of the curricula. Relatively few students are placed in this curriculum; those who do are the "cream of the crop." In addition, the data point to an element of professionalization and what is sometimes called deferred gratification. Graduates trained in Fashion Design are likely to earn less immediately after graduation than their white and Puerto Rican classmates trained in more limited skills. The low rate of the first post-high school earnings of Fashion Design students probably reflects continuing training -- now on the job. Later their earnings are likely to surpass that of their classmates who are relegated to the more routine work in the apparel industry.

We have taken the tracking as given. But note also in table 4.1 that white Garment Operators are more likely to earn in excess of the $470 median for the first quarter than are black Fashion Design and black Trade Dressmaking graduates, the more skilled presumably being in the latter two curricula. Thirty-one per cent of the white Garment Operators earned more than the median in contrast to 24 per cent of the black Fashion Designs and 25 per cent of the black Trade Dressmakers. One can find occupational situations where initial earnings are not a reliable indicator of future occupational prospects. Law clerks and medical residents may not earn much above subsistence at the start of their careers but often do handsomely in the ensuing years. It is possible that black and Puerto Ricans are slower in getting started but once in a job they make up for a sluggish start. While this is possible, there is little in the data to generate optimism for such a hypothesis.

Gallaway's Index of Income Opportunity provides another way of looking at earnings mobility. Considering only earnings during the first two quarters after graduation, we can classify each graduate in one of four cells of a matrix of earning transitions. Table 4.2.

TABLE 4.2

MATRIX OF EARNINGS TRANSITIONS

(First-to-Second Quarter After High School Graduation)

Earnings in First Quarter	Earnings in Second Quarter: Low	High	Row Totals
	(1)	(2)	
Low	Low-to-Low	Low-to-High	(1.00)
High	High-to-Low	High-to-High	(1.00)
	(3)	(4)	

Gallaway's Index of Income Opportunity equals the transition probability in cell (2) minus cell (3). Table 4.3 lists the opportunity indices for the core curricula and the three ethnic groups. Expect for Fashion Design (Technical), white graduates score higher on the Income Opportunity Index than their black and Puerto Rican classmates.

TABLE 4.3

INDICES OF INCOME OPPORTUNITY, BY CURRICULUM AND BY ETHNICITY

(First-to-Second Quarter After High School Graduation)

	Ethnicity			
Curriculum	White	Puerto Rican	Black	Total for Curriculum
Trade Dressmaking	.53	.24	.13	(.31)
Fashion Design	.41	.31	.26	(.28)
Fashion Design - Technical	.01	<-----.06---> *		(.03)
Garment Operating	.29	-.02	-.09	(-.02)

* Puerto Rican and Black Combined

Several other observations can be made concerning the figures above: (1) Minority group "techs" score higher on the Opportunity Index than white "techs"; this may be accounted for by the fact that whites are more likely to participate in post-secondary training or to be sponsored for elite jobs(and receive nominal pay while being trained). Temporarily, they are in low-paying jobs during their training, much as doctors used to be during internship; (2) Among Garment Operators, blacks and Puerto Ricans score lower on the Opportunity Index than whites. (3) Puerto Ricans in each curriculum exhibit more upward mobility than do blacks.

Gallaway's Index of Income Opportunity is a useful way of looking at the relative mobility of the three groups. There is another way which may perhaps yield additional insight into the dynamics of occupational success. For this analysis, we regard

as our criterion the proportion in each group who are "high" earners in the second calendar quarter after completing high school. Then we will attempt to decompose the difference on the criterion between whites and blacks into two components: (1) a part due to mobility, and (2) a part due to initial placement.[1] Step one in this analysis is to examine the "high" earners by curriculum and by ethnicity (Table 4.4).

TABLE 4.4

PROPORTIONS OF HIGH EARNERS AMONG TRADE DRESSMAKERS (SECOND-QUARTER AFTER GRADUATION), ACCORDING TO WHETHER INITIAL EARNINGS AND TRANSITION PROBABILITIES ARE GOVERNED BY WHITE OR BY BLACK RATES

Group governing transition rates	Group governing initial earnings	"High-Earners" (Proportion)	
White Trade Dressmakers	White Trade Dressmakers	.73	←
White Trade Dressmakers	Black Trade Dressmakers	.65*	White-black Difference: .73 - .45 = .28
Black Trade Dressmakers	White Trade Dressmakers	.52*	
Black Trade Dressmakers	Black Trade Dressmakers	.45	←

*Based on projections in generated groups

From the figures in Table 4.4 above, we see that 73 per cent of white Trade Dressmakers are "high-earners" (high in the sense of our definition, i.e., earnings more than $470 during the second

1. The idea for this type of decomposition was suggested by Otis Dudley Duncan, "Methodological Issues in the Analysis of Social Mobility", in N.J. Smelser and S.M. Lipset (Eds.), Social Structure and Mobility in Economic Development, Chicago: Aldine Press, 1966, pp. 70-73.

quarter after graduation; very, very few graduates are "high earners" in the Internal Revenue sense) contrasted with 45 per cent of the the black Trade Dressmakers, a difference on the criterion of 28 per cent. Having identified the 28 per cent difference, we turn to the task of partitioning it into a part resulting from the level of earnings in the first job placement and a part resulting from inter-quarter-mobility rates. To carry out this partition, we generate two hybrid groups, each formed by combining one basic parameter of the white group with one parameter from the black group. Thus, Group I crosses white initial earnings with black mobility rates, while Group II crosses black initial earnings with white mobility rates. The proportion of "high-earners" projected in these two groups will enable us to measure the effects of initial earnings and of mobility rates.

Group I Trade Dressmakers

White initial earnings in first quarter coupled with black transition rates

First Quarter Earnings	(Black transition probabilities) Second Quarter Earnings Low	High	White Proportions in First Quarter
Low	.66	.34	(.60)
High	.21	.79	(.40)
Second Quarter Projections:	.48 Low Earners	.52 High Earners*	(1.00)

The key figure we are after in Group I is the projected proportion of "high earners", which turns out to be .52 (the asterisked

figure). Reversing the initial earnings and transition rates in Group II yields .65 on the criterion.

Group II Trade Dressmakers

Black initial earnings in first quarter coupled with white transition rates

First Quarter Earnings	(White transition probabilities) Second Quarter Earnings Low	High	Black Proportions in First Quarter
Low	.43	.57	(.75)
High	.04	.96	(.25)
Second Quarter Projections:	.35 Low Earners	.65 High Earners*	(1.00)

Comparison of the proportions of high-earners in the two generated groups foreshadows our conclusion. Group I starts with 40 per cent high-earners (the white proportions) while Group II starts with only 25 per cent (the black initial earnings distribution). Because Group II's changes are governed by white transition rates, it overtakes Group I by the end of the second quarter with 65 per cent high-earners contrasted with 52 per cent in Group I. Now we assemble the projected figures from the two generated groups together with the figures in the white and black actual groups. The logic underpinning the decomposition in earnings into two components should be evident from the detailed steps

below.

Our decomposition amounts to a mental factorial experiment. When we hold constant the transition probabilities and vary initial earnings, the difference between white high-earners and black high-earners averages .075, as shown by the following two comparisons:

Transition Probabilities	Initial Earnings	High Earners (Proportion)	
White TD's	White TD's	.73	Difference = .08
White TD's	Black TD's	.65	
Black TD's	White TD's	.52	Difference = .07
Black TD's	Black TD's	.45	
			Average Difference = .075

In the same way, we now hold constant initial earnings and vary the transition rates, the average difference equals .205.

Initial Earnings	Transition Probabilities	High Earnings (Proportion)	
White TD's	White TD's	.73	Difference = .21
White TD's	Black TD's	.52	
Black TD's	White TD's	.65	Difference = .20
Black TD'd	Black TD's	.45	
			Average Difference = .205

We now are able to separate the differences in high earners among white and black Trade Dressmakers into two sources:

"High-Earners" among whites minus "High-Earners" among blacks		Effect of First Job earnings level		Effect of inter-quarter transition probabilities
.73 -.45 =.28	=	+.075	+	.205

In words, we originally observed a difference of .28 in "high-earners" between white and black Trade Dressmakers. We conclude by attributing 75 per cent of the difference to different transition rate differences (.205/.28) and 25 per cent to differences in the initial level of earnings (.075/.28).

In the first part of this report, we analyzed the dissimilar rates at which whites, Puerto Ricans, and blacks are placed in the various curricula at Fashion High. Whether these differences in placement are completely valid on educational criteria go beyond our data, competence, and aim. In this chapter, we regard curriculum placement as given and attempt to determine whether ethnicity continues to disadvantage blacks and Puerto Ricans within each track. We observed that within the Trade Dressmaker group and within the Garment Operator group, knowing the race of a graduate improves prediction of his subsequent earnings. In the main, of course, graduates do not go from dress firm to dress firm in the Garment Center seeking employment. The placement service operated by the New York State Employment Service and housed at Fashion High does most of the job-seeking; their work is augmented to some extent by contacts of faculty with apparel firms. Whatever mechanisms govern the placement process, it is evident that white graduates come off better than blacks. As a result, immediately upon entry into the labor market blacks learn of the omnipresent handicap of race.

As our component analysis suggests, the effects of race far from disappearing intrude even more in determing relative rates of earnings mobility. Our analysis suggests, too, that were there

a policy of "benign intervention", the intervention should not be directed at elevating wages at initial placement but rather with employers and unions in the administering of earnings increments once on the job. If intervention were completely successful in equalizing the level of initial earnings, that would reduce the difference on the criterion by 7½ per cent; equalizing earnings mobility, however, could reduce the difference by 20½ per cent.

We have confined our discussion to the Trade Dressmaking curriculum, one of the elite tracks at Fashion High. Contrasted with Trade Dressmaking, Garment Operating makes fewer demands on training and aptitude. The question arises as to whether black and white graduates in Garment Operating tend to / have parallel experiences on the labor market as do black and white graduates in Trade Dressmaking. The answer is "yes"; the following tables present the detailed data for decomposing the differences on the criterion -- the differences between the percentage of white "high-earners" and the percentage of black "high-earners" among the Garment Operators.

Group I Garment Operators

White initial earnings in first quarter coupled with black transition rates

	(Black Transition Probabilities) Second Quarter Earnings		White Proportions in
First Quarter Earnings	Low	High	First Quarter
Low	.75	.25	(.75)
High	.34	.66	(.31)
Second Quarter Projections:	.62 Low-Earners	.38 High-Earners*	(1.00)

Group II Garment Operators

Black initial earnings in first quarter coupled with white transition rates

First Quarter Earnings	(White Transition Probabilities) Second Quarter Earnings: Low	High	Black Proportions in First Quarter
Low	.52	.48	(.84)
High	.19	.81	(.16)
Second Quarter Projections:	.47 Low-Earners	.53 High-Earners*	(1.00)

Corresponding to Table 4.4 for Trade Dressmakers, Table 4.5 below shows the figures for the Garment Operators:

TABLE 4.5

PROPORTIONS OF GARMENT OPERATORS IN HIGH EARNINGS GROUP (SECOND QUARTER AFTER GRADUATION), BY INITIAL EARNINGS AND TRANSITION RATES

Group governing transition rates	Group governing initial earnings	"High-Earners" (Proportion)
White Grament Operators	White Garment Operators	.58
White Garment Operators	Black Garment Operators	.53*
Black Garment Operators	White Garment Operators	.38*
Black Garment Operators	Black Garment Operators	.32

White-black Difference: .58 - .32 = .26

*Based on projections in generated groups

Finally, the white-black difference can be decomposed into the two components:

"High-Earners" among whites minus "High-Earners" among blacks		Effect of First Job earnings level		Effect of inter-quarter transition probabilities
.58 - .32 = .26	=	.055	+	.205

Again, we conclude with the result that nearly 80 per cent of the difference on the criterion (.205/.26) can be attributed to the earnings-mobility component. The level of earnings in the first job placement contributes about 20 per cent (.055/.26). The "cost of being black" continues to exact its price.

Otis Dudley Duncan has done pioneering work in building empirical models of inter-generational socio-economic mobility.[1] Duncan finds a considerable gap in earnings after statistically equating family background, number of siblings, and family heads' occupation. He concludes with the observation that blacks are unable to convert their schooling into occupational success or into income to the same degree as whites. We see this at Fashion High. Black Trade Dressmakers and Garment Operators who have been trained by the same instructors, enter the same industry in the same geographic area at the same time receive substantially lower returns from their educational investment than whites who pursue the same vocational curriculum.

1. Peter M. Blau and Otis Dudley Duncan, The American Occupational Structure. New York: John Wiley & Sons, 1967; Otis Dudley Duncan, David L. Featherman, and Beverly Duncan, Socio-economic Background and Achievement, New York: Seminar Press, 1972.

There can be no argument here about the relative quality of schooling among graduates who have pursued the same curriculum in the same school. Inequality starts from the first job after graduation from high school. If anything, it widens thereafter. Were one to study drop-out rates among whites and blacks, conceivably the thesis advanced by Moynihan regarding relative family stability might explain differential drop-out rates. But family intactness seems irrelevant in explaining differences in earnings of graduates who pursued virtually identical educational careers in a desegregated high school and in an industry that is unionized and at the forefront of championing the welfare of economically disadvantaged minority groups. Our research design eliminates quality of schooling and family intactness as explanations for observed differences.

So far our component analysis has involved events occurring after high school graduation. We propose now to carry out a more ambitious and more interesting decomposition, one that includes not only level of earnings of first full-time job and inter-quarter mobility rates but also curriculum placement. The reader may recall our earlier discussion concerning ethnicity and curriculum. Curriculum-by-curriculum comparisons revealed patterned differences in the placement of the three groups. Except for random variation, these differences persisted for the eight successive years covered by the research. Without repeating the details, we may briefly recall that whites held a decisive advantage in being tracked into the more elite programs, such as

Fashion Design. Puerto Ricans ranked second, while blacks trailed badly. Placement in Trade Dressmaking, a track not as elite as Fashion Design, showed Puerto Ricans to be first, whites second, and blacks a poor third. In the least preferred curriculum, Garment Operating, blacks held a commanding lead.

Our analysis now involves three components which represent critical junctures in the occupational careers of the graduates. The rationale for including them in this analysis is that these important stages draw in different economic institutional agents. Curriculum placement, which occurs much earlier than the other two stages, is essentially an intra-school operation; placement in the first job after graduation involves mainly the New York State Employment Office and secondarily, administrators and faculty at Fashion High; rates of earnings mobility depend on policies within business firms, possibly observed by shop stewards. It is of substantive interest to assess the relative effects of the three components on the occupational success of Fashion High graduates.

Perhaps the main value of this type of analysis is that by statistically evaluating the consequences of possible changes -- in this case, curriculum placement, first job placement, and intra-firm mobility policies -- we can get a clearer idea of the expected payoff from various intervention strategies (by government or pressure from community groups). As we hope to show in the following analysis, efforts to reduce disparities between

ethnic groups can easily be misdirected or counter-productive.[1]

Again, the criterion will be the proportion of graduates who earned more than $470 in the second-quarter after graduation -- the "high-earners". Three components are included: (1) first-to-second quarter transition rates; (2) curriculum placement; (3) level of earnings in initial job placement. There are eight patterns, depending on whether each component was governed by the white or by the black rates (Table 4.6). Row 1, for example, shows that where the transition rates, curriculum placement rates, and first job earnings rates are all characteristic of the white population, 60.8 per cent are "high-earners".[2] Row 2 shows a small drop to 56.7 per cent when the first job level is characteristic of the black population though transition rates and curriculum assignment follow the white regime. Row 3, however, is counter-intuitive: the projected proportion of "high-earners" is 62.5 per cent which exceeds the all white components figure of 60.8 per cent (row 1), although it results from a set of mixed components. The transition rates and first job level is characteristic of the

1. For a discussion of component analysis, see Robert P. Althauser and Michael Wigler, "Standardization and Component Analysis," Sociological Methods and Research, Vol. 1, August, 1972 pp. 97-135; O.D. Duncan "Inheritance of poverty or inheritance of race?", in D.P. Moynihan (ed.), On Understanding Poverty, New York: Basic Books, 1969, pp. 85-110; Nathan Keyfitz and Wilhelm Flieger, Population, San Francisco: W.H. Freeman & Company, 1971, pp. 32-35 ("A Technigue for Decomposition"); Evelyn M. Kitagawa, "Components of a difference between two rates," J. of Amer. Statistical Assn. 50, (Dec. 1955), pp. 1168-1194; James S. Coleman, Z.D. Blum, A.B. Sorensen, and P.H. Rossi, "White and Black Careers During the First Decade of Labor Force Experience. Part I: Occupational Status", Social Science Research 1, (1972), pp. 243-270; Z.D. Blum, "White and Black Careers During the First Decade of Labor Force Experience. Part II: Income Differences, "Social Science Research 1, (1972), pp. 271-292.

2. The transition tables for each curriculum and each ethnic group on which this analysis is based appear in the Appendix

white population but the curriculum is governed by assignments characteristic of the black population. The main point of this discussion is that although the empirical rate for whites was 60.8 per cent "high-earners" and 37.2 per cent "high-earners" for blacks it by no means follows that the optimum strategy for reducing disparities between white and black groups is to substitute a white rate for a black rate on a particular component. Just as we did earlier in analyzing transition rates and first job placement, we vary one component while holding constant the other two. This enables us to determine the effect of the white rate relative to the black, if there is any.

TABLE 4.6

COMPONENTS OF DIFFERENCES IN SECOND QUARTER AMONG WHITE AND BLACK GRADUATES

Mobility Rates	Components: Curriculum Placement	Components: First Job Entry Level	"High-Earners" (Proportion)
White	White	White	.608
White	White	Black	.567
White	Black	White	.625
White	Black	Black	.575
Black	White	White	.473
Black	White	Black	.444
Black	Black	White	.437
Black	Black	Black	.372

Difference: .608 - .372 = .236

Even for the same curriculum, blacks' earnings are more likely to be lower than whites'. Overall, what would the effect be if blacks were placed in initial jobs with the same level of earnings as whites? By holding constant transition rates and curriculum placement, we estimate the effect of initially lower earnings in the first job to account for .054 from the four comparisons shown below:

Mobility Rates	Curriculum Placement	First Job' Entry Level	"High-Earners" (Proportion)	Difference
White	White	White	.608	.041
White	White	Black	.567	
White	Black	White	.625	.050
White	Black	Black	.575	
Black	White	White	.473	.059
Black	White	Black	.414	
Black	Black	White	.437	.065
Black	Black	Black	.372	
			Average Difference =	.054

Of the .236 difference on the earnings criterion between whites and blacks, .054 can be attributed to the lower-level earnings level of blacks in the initial job placement. In percentage terms, .054/.236 accounts for 23 per cent of the difference.

Earlier, we found sharp differences in the curriculum placement of the three groups. Suppose we now simulate statistically the effects of placing blacks in Fashion Design (Technical), Fashion Design, Trade Dressmaking, and Garment Operating in the same proportions that whites have been assigned to these curricula. How much would it affect the criterion? Again we average the differences of four comparisons and we see the effect of curriculum

placement -- .013. In percentage terms .013/.236 comes to about 5 per cent of the white-black difference on the earnings criterion.

Mobility Rates	Curriculum Placement	First Job Entry Level	"High-Earners" (Proportion)	Difference
White	White	White	.608	
White	Black	White	.625	-.017
White	White	Black	.567	
White	Black	Black	.575	.008
Black	White	White	.473	
Black	Black	White	.036	.036
Black	White	Black	.414	
Black	Black	Black	.372	.042

Average Difference = .013

Clearly, the primary component is not curriculum placement where the high school played a central role but rather earnings mobility from the first-to-second quarter after graduation, where the school had no influence on upgrading policies.

The four comparisons for mobility rates are detailed below:

Mobility Rates	Curriculum Placement	First Job Entry Level	"High-Earners" (Proportion)	Difference
White	White	White	.608	
Black	White	White	.473	.135
White	White	Black	.567	
Black	White	Black	.414	.153
White	Black	White	.625	
Black	Black	White	.437	.188
White	Black	Black	.575	
Black	Black	Black	.372	.203

Average Difference: .170

In summary, then, the white-black difference on the earnings

criterion can be decomposed into three components:

White "High-Earners" minus Black "High-Earners"		Effect of Mobility Rates		Effect of First Job Earnings Level		Effect of Curriculum Placement
- .608 .372 = .236 [100%]	=	.169 [71½%]	+	.054 [23%]	+	.013 [5½%]

We conclude that major changes in curriculum assignment at Fashion High would have negligible effects on the earnings disparity between balck and white graduates.[1]

1. In an earlier paper dealing with vocational gruduates in auto mechanics in Baltimore, we concluded also that curriculum changes would be an ineffectual strategy for reducing disparities in earnings. The real problem in Baltimore was that black auto mechanics earned 50 per cent of what whites earned with comparable training. Bernard Levenson and Mary S. McDill, "Vocational Graduates in Auto Mechanics: A Follow-up Study of Negro and White Youth," Phylon, Vol. XXVII, No. 4 (1966) is reproduced in Appendix.

CHAPTER 5
EARNINGS

Were we to produce figures in this chapter which showed that blacks and Puerto Ricans with comparable training as whites received comparable earnings, the results would surprise many readers; thus far, all of the evidence has pointed towards a disparity in earnings. Indeed, this is the case. The real surprise is the rapidity with which the disparity occurs. Employment opportunities which seemed to contain much promise seem to evaporate within a few months after graduation. The results can be summarized as follows: the earnings of Puerto Ricans and blacks who satisfactorily completed training in the same curricula as whites, who were trained by the same instructors in the same school and entered the same labor market in a relatively liberal community and in an industry dominated by a liberal union are not comparable to the earnings of white graduates. To say that whites earn more than Puerto Ricans and blacks does not adequately describe the differences; it is perhaps closer to the truth to state that the earnings distributions are qualitatively different.

In this chapter we will discuss some short-run and long-run differences in earnings. Our analysis will be confined mainly to Garment Operators and to Trade Dressmakers. They not only provide the largest bases but are also useful as contrasting curricula.[1] Professional statisticians, perhaps, can run down columns of means or medians and quickly assess the magnitude of the differences. Most of us, however, are quickly drowned by the informational over-load. To help the reader appreciate the economic reality behind the differences, we will employ some graphics we have found useful.

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1. Tabulations showing median earnings for regular workers in the thirteen curricula appear in Appendix F. Figures are shown for the three ethnic groups and cover up to seven years after graduation.

They will take the form of "stem-and-leaf" displays, a statistical invention of Professor John Tukey.[1] Stem-and-leaf displays are readily tallied and typed. Since the displays use actual data and not simply hatched bars, as in a histogram, it is possible for a reader to carry out additional analysis of the data. "Stems" in the displays are shown left of the vertical bar; they represent the part of the data common to a particular row. "Leaves" are shown right of the vertical bar; they represent the details. Thus, if the earnings of five graduates were $680, $733, $772, $784, and $821, the display would appear as follows:

```
6 | 8
7 | 378
8 | 2
```

In the display, 6|8 = $680;

7|378 = $730; $770; $780

8|2 = $820.

In this illustration, the stems 6, 7, and 8 represent the hundreds digit; the entries to the right of the vertical bar represent the tens digit; and the unit is $10.

The stem-and-leaf displays in Figures 5-1 and 5-2 show the earnings in the second quarter after graduation for graduates who majored in Garment Operating and in Trade Dressmaking (Vocational), respectively. Only three graduating classes are included so that the earnings in the three ethnic groups could be placed side-by-side for comparison.

Some features of the display in Figure 5-1 (Garment Operators) are readily perceived:

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1. John W. Tukey, "Some graphic and semigraphic displays," in T. A. Bancroft (ed.), Statistical Papers in Honor of George W. Snedecor, Ames, Iowa: Iowa State University Press, 1972, pp. 293-316; John W. Tukey, Exploratory Data Analysis, limited preliminary edition, Reading, Mass.: Addison-Wesley, 1970-1971.

FIGURE 5-1 "STEM-AND-LEAF" DISPLAY SHOWING EARNINGS IN THE SECOND QUARTER AFTER GRADUATION OF GRADUATES IN GARMENT OPERATING.

GRADUATING CLASSES: 1956, 1957, AND 1958

[UNITS = $10]

Blacks		Puerto Ricans		Whites	
0	00000000000000000000000000000000000000000000124466	0	0000000009	0	000
1	26699	1	8	1	26
2	00112333445555677789	2	58	2	019
3	00123455577782	3	35679	3	012
4	00021112223334566677883	4	12358	4	1225578
5	00000111123344556779	5	7789	5	003456668888
6	0011266	6	12229	6	01112223558
7	4	7	0	7	59
8		8		8	
9		9		9	
10		10		10	
11		11		11	
12		12		12	
13		13		13	
14		14		14	
15	4	15		15	

0|0 = $000

7|5 = $750

FIGURE 5-2 "STEM-AND-LEAF" DISPLAY SHOWING EARNINGS IN THE SECOND QUARTER AFTER GRADUATION OF GRADUATES IN TRADE DRESSMAKING(VOCATIONAL)

GRADUATING CLASSES: 1956, 1957, AND 1958

[UNITS = $10]

Blacks

0	000000000000179
1	2346
2	0346
3	233456679
4	0133556689
5	23444455566678899
6	13
7	056
8	0
9	
10	2
11	
12	
13	
14	

Puerto Ricans

0	0000044
1	
2	446
3	136899
4	0012244689
5	000011223347777788
6	000011255
7	02555
8	
9	
10	
11	
12	
13	
14	

Whites

0	000000	0|0 = $000
1	579	
2	03	
3	37	
4	246678899	
5	3345669	
6	000011112223566778999	
7	002467889	
8	2	
9		
10		
11		
12		
13		
14	6	14|6 = $1,460

1. The number of black Garment Operators outnumbers white and Puerto Rican Garment Operators -- in fact, there are twice as many blacks as Puerto Ricans and whites combined. (Table 2.2, presented earlier, showed that 38 per cent of the blacks are recruited into the Garment Operating curriculum contrasted with 21 per cent of the Puerto Ricans and 12 per cent of the whites.)

2. The earnings distributions are bi-modal. In each ethnic group, graduates who earned less than $95 during the 13-week period appear in row-0. Of 152 blacks, 44 are in row-0: 38 with no earnings at all and 6 with earnings from $10 to $60. If, with the assistance of the placement services, graduates still are not employed within six months after graduating, their prospects without help seem drearier. In recent years, the Bureau of Labor Statistics has modified its methods of counting unemployed workers. Anyone not actively seeking work during the four weeks previous to the survey is assumed to be uninterested in working and accordingly is not included in the labor force count. In 1971 the official unemployment rate for black teenagers aged 16-19 was 32 per cent -- a figure which many regard as an undercount.[1] Given such an enormous rate of unemployment, why a youngster quits looking for work might be more indicative of despair than disinterest in work. Figure 5.1 covers graduates in 1956, 1957, and 1958: were they being surveyed by BLS today, most of the 44 would be classified "not in labor force." Curiously, some of those who worked a few days and earned $10, $20, or $40 would

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1. For criticism of the procedures used by BLS to classify inactive unemployed, see: William J. Abraham and A. J. Jaffe, "A Note on Alternative Measures of Unemployment and the Shortfall in Employment, 1970-1972," The New York Statistician, Vol. 23, No. 5, May-June 1972; John C. Leggett and Claudette Cervinka, "Countdown: Labor Statistics Revisited," Society, November/December 1972, pp. 99-103.

be counted as "employed."

3. Elementary statistics texts sometimes depict exotic-shaped distributions in the first chapter: leptokurtic and mesokurtic distributions; distributions with extremely long tails; U-shaped, J-shaped, S-shaped, and bell-shaped distributions, etc. Bi-modal distributions often rate a picture but after the ceremonial bow, they never are discussed again. Such distributions do occur, however. For instance, in statistics courses one finds that grades are often distributed in two clusters: in one cluster, students understand what the course is about whereas in the other cluster students have some pathology concerning numbers. An example from demography is age at death. Around age 1-2, mortality tends to be high; thereafter the rate declines until about age 70, when the distribution shows a second mode.

Bi-modal or multi-modal distributions usually are interpreted as a composite of two or more distributions operating under contrasting regimes. In the stem-and-leaf displays shown above, we can think of the figures as a mixture of a low-earner (or hard-core unemployed) group and a regularly-employed group. The ratio of the low-earners to the regular-earners differs considerably in the three ethnic groups. Among the black and Puerto Rican Garment Operators, perhaps 30 per cent are in the low-earner group; among the whites, there are only three in row-0, just enough to make the white distribution bi-modal.

4. Among black Garment Operators, the primary mode appears in row-0; among Puerto Ricans, it also appears in row-0; among the whites, the primary mode occurs in the $500s-row. The secondary mode for blacks occurs in the $400-row; among Puerto Ricans, the distributions seems rectangular in rows 3, 4, 5, and 6.

5. Another feature of such displays is that they show details about the tails of the distributions which in histograms or tabulations tend to be grouped out of existence. It is not without irony that in the seven years covered by the research the graduate who earned the most during the second quarter after graduation in either the Trade Dressmaking or Garment Operating curriculum was a black Garment Operator. We have no direct way of verifying her earnings of $1540 for the quarter. It does appear to be consistent with high earnings in previous quarters shown on the Social Security work-history printouts. (Her SIC code is unknown). Considering the fact that her earnings were about six standard deviations from the mean of the black Garment Operators, one wonders whether she was assigned to the appropriate curriculum or whether she was in the appropriate school.

We will not discuss in detail Figure 5-2, the stem-and-leaf display for Trade Dressmakers. It requires no extraordinary visual acuity to observe that the white group has fewer low-earners and more high-earners than the other two groups.

Figures 5-1 and 5-2 show earnings for graduates in 1956, 1957, and 1958. Lest the reader think that the earlier years were selected because of some propagandistic motive, we show a stem-and-leaf display for Trade Dressmakers in the most recent graduating classes in the study, 1962 and 1963. Figure 5-3 reveals much the same pattern as does Figure 5-2. Indices of earnings similarity between the groups were computed for both sets of distributions:

Indices of Similarity in Earnings

	Figure 5.2 [1956, 1957, & 1958]	Figure 5.3 [1962 & 1963]
Blacks vs. PRs	68	82
PRs vs Whites	67	51
Blacks vs Whites	57	51

The indices of similarity suggest that the overlap in earnings between whites and the other two groups is less in the more recent period than in the earlier period.

Distributions can be compared in many ways; it may be interesting to examine the distributions in a somewhat different way. Consider this question: A large black bowl contains chips on which are written the incomes of black families in the United States; a large white bowl contains a large number of chips showing the incomes of every white family. We dip in the black bowl and in the white and remove one chip from each at random. What is the probability that the chip removed from the white bowl will show a higher income than the chip removed from the black bowl? (The reader may recall the earnings distribution of black and white families in Table 2-3.) The odds are approximately 1.95 to 1 that a randomly-selected white family will have a higher income than a randomly-selected black family.

How about the Trade Dressmakers who graduated in 1956-1958? The odds are slightly more than 2:1 that a randomly-selected white Trade Dressmaker will earn more during the second quarter after graduation than a randomly-selected black Trade Dressmaker. (Remember, too, that among black and white families in the whole country, blacks on the average have less schooling than whites, whereas we are comparing graduates with equal schooling and training.) How about 1962-1963? The odds that a

FIGURE 5-3 "STEM-AND-LEAF" DISPLAY SHOWING EARNINGS IN THE SECOND QUARTER AFTER GRADUATION OF GRADUATES IN TRADE DRESSMAKING (VOCATIONAL)

(GRADUATING CLASSES: 1962 & 1963)

[UNITS = $10]

Blacks		Puerto Ricans		Whites	
0	000000000000125667	0	000000055	0 | 000	0|0= $000
1	67	1		1 | 9	
2	056	2	4	2	
3	146	3	238	3	
4	02558	4	0135	4	
5	22255589	5	14689	5 | 01	
6	12246788	6	00122255556	6 | 56	
7	01224479	7	04667	7 | 1237	
8	1	8	4	8 | 134	
9		9		9 | 11238	9|1= $910

randomly-selected white Trade Dressmaker earns more than a randomly-selected black Trade Dressmaker are about 3:1.

There is no doubt that at Fashion High the Trade Dressmaking curriculum ranks much higher in the curriculum stratification system than does the Garment Operating curriculum: it demands more training and more aptitude. What is the probability that a randomly-selected white Garment Operator earns more than a randomly selected black Trade Dressmaker. The odds are about 8:5 that a white in the lower-ranked curriculum will earn more than the black in the higher-ranked curriculum. That surely is an anomaly to ponder upon when trying to decide whether the blacks and Puerto Ricans are getting a fair shake with respect to the employment opportunities.[1]

Let us briefly return to a problem first raised in Chapter 3, namely, the distinction between training-related and training-unrelated placement. The difference in earnings between those who leave the apparel industry compared to those who stay in the industry may explain, in part, why so many of the white graduates choose to leave the industry.

In Chapter 3, Job Placement, we indicated that vocational educators emphasize training-related employment as a criterion of their success. We suggested earlier that placement was not simply the result of the quality of training provided by the vocational school but depended on the opportunity structure in the community. Moreover, the training-related placement criterion does not take account of relative wage levels offered in training-related employment compared to wage levels in training-unrelated employment. The wage levels in the apparel industry relative to other industries are not subject to control by the administrators of the High School of Fashion Industries.

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1. The odds apply to 1956-1958. There were practically no white Garment Operators in the 1962 and 1963 graduating classes.

Although white students were greatly advantaged in curriculum assignments at Fashion High, we have the unexpected finding that relatively more whites were placed in training-unrelated employment than blacks or Puerto Ricans. In the four core curricula, for example, 28 per cent of the blacks and Puerto Ricans went into training-unrelated employment contrasted with 45 per cent of the whites.

Let's look at the earnings. The median earnings for graduates placed in training-unrelated employment and in training-related employment are set out in Table 5-1 below . A comparison of columns (1) vs (2) reveals that in 9 of 11 comparisons, earnings in training-unrelated employment exceeded earnings in training-related employment. Table 5.2 shows the eleven training-unrelated/training-related ratios. In each of the four curricula, white graduates earn more by defecting from the apparel industry.

The fashion industry is marked by intense domestic and foreign competition. The ILGWU campaigns vigorously each year for the government to set limits on apparel importations. Despite the fact that the industry is highly organized, wages generally are lower in the apparel manufacturing industry than other manufacturing industries. Were wages higher, no doubt more white graduates would remain in training-related employment. Of course, if wages were sufficiently high to attract more whites, some of the blacks and Puerto Ricans who have been recruited to the apparel industry might be displaced. In any event, the white exodus from the industry appears unconnected with the quality of training offered by Fashion High. That so many graduates can find training-unrelated jobs with higher pay suggests that the training at Fashion High is not so narrowly vocational as many critics of vocational education would lead us to believe.

TABLE 5-1

MEDIAN EARNINGS FOUR-TO-SIX MONTHS AFTER GRADUATION, BY TYPE OF EMPLOYMENT, BY CURRICULUM, AND BY ETHNICITY *

Curriculum & Ethnicity	Type of Employment: Trade-Unrelated	Trade-Related	Combined
Garment Operating:			
Black	$441 (88) >	$433 (201)	$436 (289)
Puerto Rican	396 (22) <	498 (62)	484 (84)
White	572 (38) >	542 (35)	561 (73)
Trade Dressmaking:			
Black	$422 (43) <	$513 (126)	$504 (169)
Puerto Rican	574 (33) >	524 (112)	555 (145)
White	661 (57) >	591 (67)	618 (124)
Fashion Design(Vocl):			
Black	$548 (13) >	$474 (17)	$502 (30)
Puerto Rican	678 (12) >	609 (22)	634 (34)
White	680 (17) >	658 (26)	670 (43)
Fashion Design(Techl):			
Black & PR combined	$687 (13) >	$372 (29)	$532 (42)
White	655 (27) >	608 (40)	630 (67)

*Base appears in parentheses

TABLE 5-2

RATIO OF TRADE-UNRELATED EARNINGS/TRADE-RELATED EARNINGS, BY CURRICULUM AND BY ETHNICITY

[FOUR-TO-SIX MONTHS AFTER GRADUATION]

Curriculum & Ethnicity	Trade-unrelated Earnings/ Trade-related Earnings
Garment Operating:	
Black	1.02
Puerto Rican	0.80
White	1.06
Trade Dressmaking (Vocational):	
Black	0.82
Puerto Rican	1.10
White	1.12
Fashion Design (Vocational):	
Black	1.16
Puerto Rican	1.11
White	1.03
Fashion Design (Technical):	
Black & PR Combined	1.85
White	1.08

So far we have considered only short-run earnings. Appendix F gives the details on earnings for a span of seven years for each ethnic group and for the thirteen curricula. There are many ways of analyzing these earnings. For example, in Tables F-18, F-19, and F-20 are reported ratios of median earnings for Puerto Ricans/Whites, Blacks/Puerto Ricans, and Blacks/Whites. If we include all of the ratios regardless of labor market experience, the median ratio for each pair of ethnic groups is as follows:

	Median Ratio
Blacks/Whites	.83
Puerto Ricans/Whites	.87
Blacks/Puerto Ricans	.93

That is, if we look at all of the median Black earnings/median white earnings, one-half of the ratios are less than .83; the middle 50 per cent range from .77 to .93. Puerto Ricans do slightly better with a median ratio of .87; the middle 50 per cent range from .78 to .98. Blacks relative to Puerto Ricans earn slightly less: the median ratio is .93 and the middle 50 per cent range from .88 to .98. In general, these ratios suggest that the long-range picture is similar to the short-run pattern.

The reader is free to judge for himself whether these ratios point to a pattern of equal employment opportunity. Actually, these ratios are overly optimistic. Note in Tables F-5 to F-17 that the table headings state that the earnings apply to "four-quarter workers". These tabulations were requested from Social Security before we had an opportunity to examine any data. The aim was to compare earnings of "regular workers"; with Social Security data, the simplest way of doing this is to compare workers who are covered by Social Security in each of the four calendar quarters

of a given year. The minimum earnings to qualify for coverage are $50 per employer per calendar quarter. Earlier in this chapter we exhibited stem-and-leaf displays showing earnings during the second calendar quarter after graduation. We observed the high proportion of blacks and Puerto Ricans with no earnings in the second quarter whereas few whites were in the no-earnings category. Thus, the effect of excluding graduates with no earnings in a quarter, as the definition of "regular worker" requires is to exclude a disproportionate number of low-earning blacks and Puerto Ricans. Thus, a ratio of .83 for black/white earnings is probably an over-estimate.

It will perhaps be more informative to examine in detail one curriculum. Of the four core ones, Trade Dressmaking(Vocational) seems the most interesting candidate for detailed analysis (Table F-15). The earnings can be thought of as the joint effect of two factors: (1) experience on the labor market, and (2) ethnicity. For black Trade Dressmakers, the earnings each year are approximately as follows:

Blacks	
1 year experience	$2,080
2 years' experience	2,403
3 years' experience	2,666
4 years' experience	2,869
5 years' experience	3,027

For Puerto Ricans, the schedule of earnings is approximately the figures above plus $181 per year:

Puerto Ricans	
1 year experience	$2080 + $181 = $2,261
2 years' experience	2,403 + 181 = 2,584
3 years' experience	2,666 + 181 = 2,847
4 years' experience	2,869 + 181 = 3,050
5 years' experience	3,027 + 181 = 3,208

For white Trade Dressmakers, the earnings each year are approximately those given for blacks plus $623 per year:

White Trade Dressmakers

1 years' experience	$2,080	+ $623	= $2,703
2 years' experience	2,403	+ 623	= 3,026
3 years' experience	2,666	+ 623	= 3,289
4 years' experience	2,869	+ 623	= 3,492
5 years' experience	3,027	+ 623	= 3,650

The earnings picture can be encompassed more clearly by the plot in Figure 5-4 (another of Tukey's graphics). The fitted earnings for any combination of ethnicity and experience is found by referring to the vertical coordinate of the intersection of corresponding lines. Thus, the intersection of black, one-year experience is slightly below the $2100 coordinate and is the lowest-earning combination; the highest combination is white plus five years' experience with earnings at $3,650.

We can also see in Figure 5-4 the pattern of yearly increases. The increase in earnings from 1-2 years' experience > 2-3 years' experience > 3-4 years' experience > 4-5 years' experience. Or in figures, the successive increments are:

	Increment	
1-2 years	$323	($6 per week)
2-3 years	$263	($5 per week)
3-4 years	$207	($4 per week)
4-5 years	$158	($3 per week)

The ethnicity differences appear to be constant: Puerto Ricans receive $181 per year more than blacks ($3.50 per week); whites earn $630 per year ($11 per week).

Some other interesting observations can be made by observing the plot in Figure 5-4. For example, blacks with four years' experience earn about the same as Puerto Ricans with three years' experience ($2,869 for blacks; $2,847 for Puerto Ricans); both earn less than whites with two years' experience ($3,026).

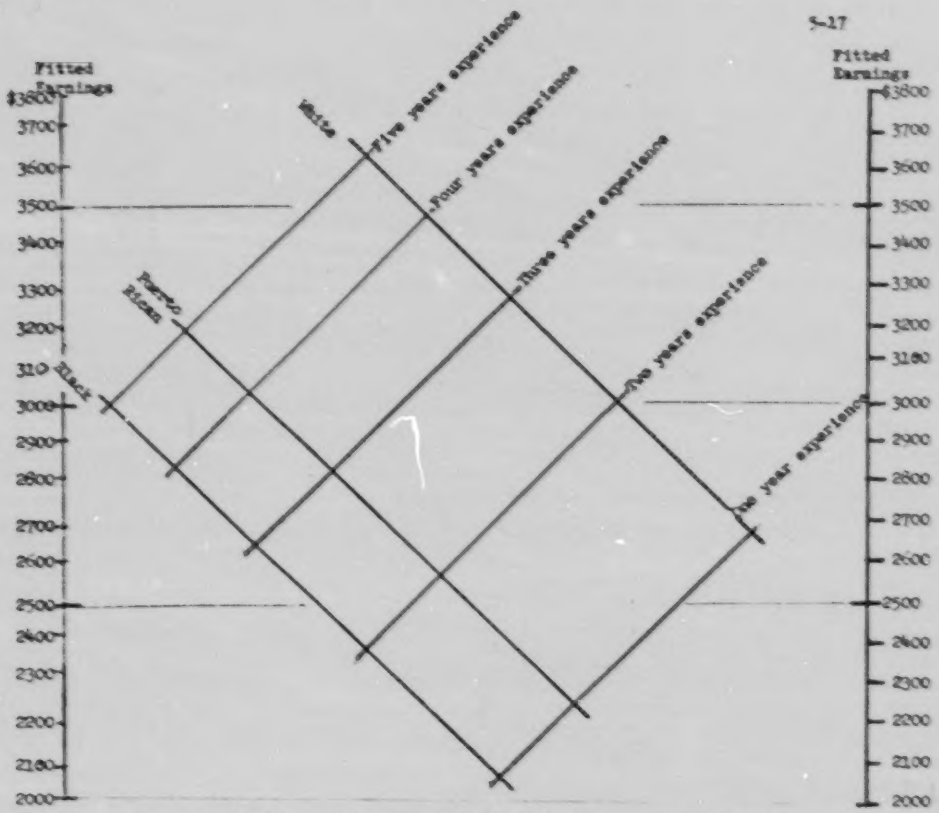

Figure 5-4. How earnings of Trade Dressmakers(Vocl) are affected by ethnicity and years of experience on the labor market. For any combination of ethnicity and years on labor market, earnings is shown by the vertical coordinate of the intersection of corresponding lines.

We have drawn the ethnic lines in the plot as parallel. There are many people who believe that differentials in earnings are narrowing. A more precise fit would probably show, not narrowing, but a broadening of the lines. If we examine the difference between the earnings of whites and blacks, the yearly differences are as follows:

Year	(White earnings - Black earnings)
1	$539
2	683
3	547
4	786
5	757

The rank correlation is .60 in the direction of broadening of earnings differences. The question whether the differences are broadening or remaining constant can be answered in a simple way. Since the Social Security Administration already has the account numbers of all of the graduates, it would require one computer pass to update all of the work-history records by another ten years. And if a second SIC were obtained, say ten years after the first, it would be possible to estimate how many of those who started in the apparel industry have remained and how many of those who initially went into training-unrelated employment subsequently went into the fashion industry.

CHAPTER 6

MAIN FINDINGS AND CONCLUDING OBSERVATIONS

Summarized below are the main findings of the study. For those convinced that the blacks and the Puerto Ricans are making slow but steady economic progress, the findings here offer scant support. For those who think of discrimination as mainly a Southern problem, they too will find little support. For those with great faith in the power of education to solve racial inequities and lift minorities out of their poverty, the findings will do little to bolster that faith.

Main Findings

A. Curriculum Placement

1. The overall ethnic composition of vocational and academic high schools are used to classify schools with respect to racial-ethnic integration. Overall ethnic composition is not a dependable predictor of the internal life of a school. The High School of Fashion Industries has always been classified officially as "integrated". For whatever reason, whites are placedin preferred curricula, whereas Puerto Ricans and blacks are placed in less preferred curricula.

For example, recruitment to an elite program such as Fashion Design, is 8 per cent for blacks, 13 per cent for Puerto Ricans, and 26 per cent for whites. Contrastingly, in the least preferred curriculum, Garment Operating, blacks are recruited 8 per cent, Puerto Ricans 21 per cent, and whites 12 per cent.

B. Placement

1. Vocational educators put a lot of emphasis on the criterion "training-related" employment. A number of weaknesses in this criterinn have been suggested by the research. It does not take into account the opportunity structure of the community. Thus, the fact that Wholesale Trade (SIC 50) recruited 5 per cent of the graduates of Fashion High loses some significance when it is observed that 11 per cent of the city's labor force are employed in Wholesale Trade. Moreover, it would not have been evident from placement figures alone that Apparel and accessory stores (SIC 56) significantly more than chance than any other industry, including Apparel Manufacturing (SIC 23).

2. Within each of the four core curricula, black graduates are much more likely to be employed in manufacturing. Contrastingly, whites are much more likely to be employed in wholesale and retail trade.

3. There is greater similarity in placement in major industries between graduates of the same ethnic group than graduates within the same curriculum. Whether a graduate finds employment in manufacturing

depends more on whether she is black or Puerto Rican than on whether she completed a program in Garment Operating or Trade Dressmaking.

4. Although whites were assigned to the choice curricula at Fashion High, they are less likely to remain in the Apparel industry than are blacks and Puerto Ricans, revealing another weakness in the training-related criterion.

5. Recruitment to various sectors of the local economy was significantly dependent on ethnicity. Industries such as insurance, banking, real estate, textile mills, and apparel stores recruited relatively more whites than could be accounted for by chance; medical services and the apparel manufacturing industry recruited relatively more blacks and Puerto Ricans.

6. Within the apparel industry, whites were more likely to be recruited to firms manufacturing outerwear whereas blacks were more likely to be recruited to firms manufacturing undergarments.

7. The overall effect of the placement process was to place graduates in racially and ethnically more homogeneous working environments than the ethnic environments in the various curricula at Fashion High. Four-to-six months after graduation this process is already quite marked.

8. The most interesting and perhaps most important results of the study are derived from "component analysis." This type of analysis permits one to identify the sources of differences in the rates of high earners among whites and among blacks. The most important component is the differential mobility rates of whites and blacks in the first job. Curriculum placement at Fashion High, which intuitively would have seemed to produce most of the differences between blacks and whites with respect to employment and earnings turns out to be negligible. What this means is that were blacks placed in the various curricula according to the white rates and whites placed in the various curricula according to the black rates, the effects on subsequent earnings would be minor compared to mobility rates and level of first job placement.

The important components occur after graduation from high school. The analysis also suggests how intervention strategies can be self-defeating or ineffective unless careful evaluation of the effects of changes are studied systematically. Although curricula differences seem to suggest great discrimination, efforts to change curricula assignments would probably prove an ineffective strategy in reducing differences in earnings. While schools often make vulnerable targets, the place for change is not the school but the marketplace.

C. Earnings

9. Analysis of short-run earnings were based on earnings received during the second quarter after graduation. The earnings distributions were of a bi-modal character: among blacks and Puerto Ricans, a large proportion of Garment Operators and Trade Dressmakers had still not found employment within six months after graduation. The proportion among whites was small. Considering the fact that they could not find work with the help of the school and the State Employment Service, the prospects of many black and Puerto Rican youngsters seem dreary. Excluding the non-earners, within each curriculum blacks earned the least, Puerto Ricans next to the least, and whites the most.

10. Comparison of the earnings of graduates in the most recent graduating classes compared to those in 1956-1957-1958 classes showed no narrowing of earnings differences. In 1956-1958, the odds that a randomly-selected white Trade Dressmaker earned more than a randomly-selected black Trade Dressmaker were about 2:1. In 1962-1963 the odds were even higher.

11. At Fashion High, the Garment Operator curriculum requires less training and aptitude than does the Trade Dressmaker curriculum. Nonetheless, the odds that a white Garment Operator earns more than a black Trade Dressmaker are 8:5.

12. Comparison of earnings of graduates who went into training-unrelated to training-related employment reveals another weakness in the training-related criterion. Although whites were greatly advantaged in the curriculum placement process, almost half of the whites and one quarter of the blacks and Puerto Ricans went into training-unrelated employment. The explanation for leaving the apparel industry can be attributed, at least in part, to the generally higher wages outside the industry. Clearly, Fashion High should not be judged because of differences in earnings among industries.

13. With respect to longer-run earnings, among regular workers the ratio of black earnings to white earnings among the thirteen curricula for the seven-year follow-up period was about .83; for Puerto Rican earnings relative to white earnings, the ratio was .87. The definition of regular workers requires earnings in each of the four quarters of a given year and consequently excludes a disproportionately larger proportion of blacks and Puerto Ricans. The ratios, therefore, should be regarded as ovee-estimates.

14. There is no evidence that differentials in earnings narrow with increased experience on the labor market. In Trade Dressmaking (vocational), for example, the difference in earnings between whites on one hand and Puerto Ricans and blacks on the other persist for at least five years after graduation.

In sum, the substantive results do not convey a picture of equal employment opportunities.

It should be stated, however, that the technique used in this research can be adapted by vocational schools -- possibly administered by the Department of Labor -- to gauge the progress of graduates. Simple studies can be carried out with accuracy and low cost and can direct attention to training programs that need revamping or to dead-end programs that should be abandoned, or to trades with changing prospects in the community, or to trades which because of artificial age, sex, or racial barriers result in under-utilization of vocational training. Without

more occupational information and knowledge of the employment experiences of graduates, activities such as vocational guidance and counselling, evaluation of training effectiveness, and development of post-secondary training programs are not apt to be attuned to the realities of the labor market.

APPENDICES

APPENDIX A[1]

HISTORY OF THE RESEARCH

The history of this research began in 1963, when the Equal Opportunity Commission of Baltimore sought help from Professor James S. Coleman and other members of the Social Relations Department, Johns Hopkins University, in conducting a study of employment discrimination. The commissioners said that their budget allowed $5,000 for research (though it later shrank to $3,000). Previously, the most sophisticated research at the Commission amounted to hand-tallies of racial references in Baltimore employment ads. When they came to the Social Relations Department, they had in mind a vague study of vocational school graduates, with possibly 100 interviews of white and black gradustes.

One problem of Equal Employment Commissions is that they are set up as agencies to hear any citizen's complaint of discrimination. If the complaint appears to have merit, they attempt to negotiate the matter with the employers. Statistics on complaints, however, are unrepresentative of the state of discrimination in the community and is not a strategic way of uncovering or demonstrating discrimination. Few agencies have the power, funds, or know-how to initiate any serious research.

Dr. Bernard Levenson, of the Social Relations Department, undertook to carry out a study on the Commission's behalf. He convinced them that 100 qualitative interviews might, at best,

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1. This statement on the history of the research is taken from the doctoral dissertation of Sally Hillsmun Baker, who made use of some of the Social Security work history data in her thesis: "Entry into the Labor Market: The Preparation and Job Placement of Negro and White Vocational High School Graduates," unpublished Ph.D. dissertation, Columbia University, 1970, pp. 459-467.

get a one half-column press release in the Baltimore Sun; beyond the one day's publicity, it would have no value. Its small sample would be inconclusive and anecdotal horror stories by blacks would not convince anyone not already convinced. Even more important, neither the members of the Commission nor those doing the analysis of the data would have any confidence in the meaning of the results; certainly, they would be unable to know whether economic discrimination was getting worse, better, or remaining the same.

Levenson thought what the Commission needed was "barometer-type research," a study which yielded definitive, unassailable facts about employment discrimination which could be replicated two or three years later to determine the extent of progress. Obviously, to remain within the small budget, there was a need for innovation in the research design. Levenson suggested that an effort be made to secure Social Security work history data for several graduating classes of Baltimore's two vocational schools--Carver Vocational High School (which was 100 per cent black) and Mergenthaler Vocational High School (which was 98 per cent white). Probably, if this research request had occurred in a city other than Baltimore, the idea of Social Security records would not have been considered. Social Security is Baltimore's largest employer (some 12,000 employees) and all of its data processing is done in Baltimore (a few blocks from where Dr. Levenson then lived).

The Social Security Administration, it turned out, did have a policy of making data available to outside researchers as long as the confidentiality of the information on individuals was safeguarded and as long as processing the data did not impair regular operations. When these two conditions could be met,

SSA would consider outside requests. Precisely when the researcher obtained his requested data was contingent on SSA's work-load and this could be a very long time. He was required to reimburse SSA for all costs incurred in processing the data. Almost universally, requests were for aggregate data covering a state, county, or industry. The Levenson study was one of the first, perhaps the first, to request work history data for a list of specified individuals, in this instance the graduates of the previous five graduating classes of Carver High School and Mergenthaler High School in Baltimore.

This research strategy of using already-collected SSA data was not without problems; at the beginning of the study, in fact, it was far from certain that the research was viable. (The anxiety was relieved by the fact that the budget was so small.) One problem was the confidentiality of individual records. To assure this confidentiality, Social Security assigned random numbers to each student and Levenson never knew which specific earnings record corresponded to which student. Moreover, beyond earnings, employment, curriculum, sex, graduating class, and school, additional variables must be severely limited--since any extensive profile of characteristics would easily identify the student.

A second problem concerned the question of how many work-histories could be found. Since the school records contained no Social Security account numbers, it was necessary for SSA to match by computer a set of characteristics on each graduate,

obtained from school records, with the 50 million Social Security records. The characteristics used were: name, address at time of applying for SSA account number, year and place of birth, parents' names and places of birth. Not known was how many cases could be unequivocally matched. (To suggest the difficulties, it might be mentioned that SSA computer people who were demonstrating the operation to Dr. Levenson, discovered that there was another white male named Bernard Levenson, born on his birth date.) The completed search, however, resulted in only 2 or 3 per cent of cases that could not be unequivocally identified. Some of these graduates may never have worked, or if they did may have worked only for the federal government, may have been imprisoned, or died before they ever took out a Social Security number. (With New York vocational school graduates, the loss was slightly higher than 2 per cent; Puerto Rican names were more difficult to identify.) It would be difficult to conceive of any follow-up scheme, no matter how much money and time were spent, that would yield such a small attrition of cases.

When it was clear there were no major obstacles to this research, Dr. Levenson completed the study of graduates of the two Baltimore vocational high schools. A much larger study of vocational high school graduates was then undertaken by Levenson funded by the Social Security Administration under its research grants program. It should be emphasized that obtaining work-history data from Social Security and receiving a research grant from them are independent matters. An outside researcher might

be funded by another agency or a foundation and secure work-history data from SSA; and a researcher might secure a grant from SSA without having anything to do with SSA data.

The larger research effort necessitated obtaining access to school records in Baltimore and in three other eastern cities--New York, Philadelphia, and Boston. Because of the racial issues involved, getting access to these school systems encountered great resistance. This was a period when racial riots flared in Watts, Detroit, and other cities across the country. Consequently, school administrators were reluctant to have differences between their white and minority graduates publicized. But it is simply not possible to do any serious follow-up study of vocational school graduates without taking into account the race or ethnicity of graduates.

Each of the four cities differed in what they regarded as sensitive information. For example, educational administrators at 110 Livington Street in New York never raised the issue of race. Despite numerous formal and informal meetings with officials, no one ever asked any project staff member how the race of students was determined. (In New York, Boston, and Philadelphia, it is not legal to have a student's race entered on his records. In most cases, it was determined from the picture in the school yearbooks or by finding a picture of a brother or sister in some previous graduating class.) Baltimore, on the other hand, was much more defensive about the question. Headquarters refused to divulge the number of Negroes attending Mergenthaler High School. By counting a sample of students leaving the school at 3 P.M., it was estimated

that there were 2 per cent. The figure was never challenged. Or take I.Q. Boston, the least cooperative of the school systems, had the project scrutinized by its legal department and after several months categorically refused to allow I.Q. to be abstracted from any records. New York issued no ruling at all on the matter, though the head of its 27 vocational schools thought it would be unprofitable to include it in the research. Philadelphia strongly urged that I.Q. scores be abstracted; it was almost a condition for access.

As far as access to school systems, what was learned from this study? The one generalization, perhaps, is that every school system operates differently and there is no one best way of gaining access. What does help is having other schools "in the bag," as it were. Access to Baltimore schools was facilitated by the city's Equal Opportunity Commission who had some contact with the mayor of Baltimore. After Baltimore signed up, it was easier to gain access to New York schools than if an attempt had been made to get in "cold." With Baltimore and New York cooperating, it was simpler to get Philadelphia's cooperation. And with these three eastern cities signed up, it was easier to get cooperation from Boston--easier, but not easy. In some cases, the best means of access was through a principal of a particular high school; once he agrees, approval by headquarters may be routine. In other cases, headquarters was obtained first, and then the principal went along with the okay from headquarters. In other cases, an influential educator or other intermediary paved the way. Studying black and white vocational students several years ago required as much

diplomacy as if one wanted to study drug use in high school students today.

Data on six schools was secured from the Social Security Administration. Dr. Levenson, then Senior Research Associate at the Bureau of Applied Social Research, Columbia University, made available the data on the High School of Fashion Industries to the present researcher, a doctoral candidate in sociology at Columbia. In reality, it was more than a study of a single school. It was a study of induction into a major industry in New York City. A grant was obtained from the Manpower Administration of the U.S. Department of Labor in support of the doctoral thesis, which included not only the quantitative analysis of the High School of Fashion Industries work-history data but also an extensive field study conducted in the school itself.

The original idea for Dr. Levenson's research was to analyze empirically the employment progress of black and white vocational high school graduates as well as to evaluate the effects of vocational schools. Surprisingly little is known of what becomes of vocational graduates. At the time, moreover, it was universally believed that blacks were making steady economic gains, in fact, some felt that blacks were moving altogether too fast. However, Levenson's analysis of the original Baltimore data showed no gains by black high school youth relative to whites in the same cohorts.[1]

1. In the article in Phylon, for example, Levenson and McDill show that black youth in Baltimore who studied automotive mechanics in high school uniformly earn 50 per cent of what white youth earn, despite the fact that the ratio of earnings of nonwhites to that of whites in the State of Maryland was 57 per cent. Bernard Levenson and Mary S. McDill, "Vocational Graduates in Auto Mechanics: A Follow-up Study of Negro and White Youth," Phylon, XXVII, No. 4 (1966).

Further questions, however, were raised by these earnings data: how do such considerable and persistent differences in earnings appear immediately upon entry into the labor market? There are two ways of seeking an answer to this question. It was clear to this researcher that such early differences between black and white youth involved a two-pronged process: differentiation among racial groups in the educational system (in their training opportunities and educational experiences) and differentiation among them in the labor market (in the employer-applicant job transaction). Partly because of her previous interest in "people-processing organizations," the researcher chose to investigate primarily the former influence. This decision was also made on methodological grounds. The researcher ruled out a survey approach, namely locating and interviewing the graduates in the sample on whom SSA data had been collected. Tracking down 1,950 people on whom the only piece of useful information was their home address during their last year in high school--some five to thirteen years previously--was considered at best tremendously expensive and difficult and at least unproductive for analytic purposes. The results of such a search would have to produce a sufficient number of graduates within each vocational trade to make analysis worthwhile. In addition, the issue raised in the Introduction was considered very seriously: there was not enough information on the school or its students' experiences to assure survey data would produce meaningful distributional information. This central concern also influenced the researcher's decision to do a field study in the high school rather than to systematically

survey or personally interview people in the apparel industry and other employers. It was decided that the research would produce more meaningful results if it were restricted to the school itself and qualitative in emphasis.

Access to the school for the second time was not difficult. Dr. Levenson's original research was of considerable interest to its administrators, partly because schools in general rarely get feedback on their graduates and this school was no exception. They were agreeable to let the researcher conduct interviews with students and teachers in the school because they also believed that quantitative data, such as that collected by Dr. Levenson, could be better interpreted when teachers and administrators in the school provided qualitative information and background.

The aim of this research was to show that people-processing organizations have considerable impact on the individuals that they process and their influences are not always conscious, obvious, rational, or immediately recognizable. The latent influences and outcomes and the processes by which they come about are an important subject for sociological research. However, it is not entirely the case that the choice of a research topic or the particular "outcomes" among many which are researched in depth is value-free. The fact that the source of clearcut racial differences was chosen to be studied is partly a consequence of this researcher's concern with equality and freedom in the society. If, in addition to the information this study brings to bear on sociological issues concerning the operation of stratification systems and educational organizations, there

is more public understanding of discrimination then the present research effort will have been even more worthwhile.

Everyone in the school was extremely cordial and cooperative, indeed they could not have been more helpful and open in their willingness to grant the researcher substantial amounts of time and information. School personnel were so helpful that at times this researcher almost wished the research had somehow been much more favorable to the school and its outcomes. It is clear that the problems discussed in this study are difficult ones and there are no simple answers.

DISTRIBUTION OF GRADUATES FROM HIGH SCHOOL OF FASHION INDUSTRIES

BY CURRICULUM AND BY ETHNICITY
(1956-1963)

CIRRICULUM	ETHNICITY				
	Black	Puerto Rican	White	Unknown	Total
1. Fashion Design - Technical (Females)	44	25	106	5	(180)
2. Fashion Design - Vocational (Females)	48	50	53	6	(157)
3. Fashion Merchandising - Vocational (Females)	23	21	24	5	(73)
4. Fur Garment Manufacturing - Vocational (Males)	12	5	9	6	(32)
5. Garment Operating - Vocational (Females)	423	119	73	21	(636)
6. Interior Decorating - Vocational (Females)	29	11	17	3	(60)
7. Men's Tailoring - Vocational (Males)	138	54	28	14	(234)
8. Millinery - Vocational (Females)	32	12	15	2	(61)
9. Shoe Fitting - Vocational (Males)	24	13	13	6	(56)
10. Trade Dressmaking - Technical (Females)	9	5	34	1	(49)
11. Trade Dressmaking - Vocational (Females)	234	206	133	16	(589)
12. Upholstery - Vocational (Males)	32	17	28	4	(81)
13. Women's Garment Manufacturing - Vocational (Males)	56	31	72	12	(171)
TOTALS:	(1104)	(569)	(605)	(101)	(2379)

HIGH SCHOOL OF FASHION INDUSTRIES
New York City

TABLE 3-2
DISTRIBUTION OF GRADUATES
BY ETHNICITY AND BY YEAR

1956 - 1964

(Raw Numbers)

GRADUATING CLASS	ETHNICITY				TOTAL
	PUERTO* RICAN	NON-PUERTO RICAN			
		BLACK	WHITE	UNKNOWN	
June 1956	55	118	98	3	(274)
June 1957	45	160	93	12	(310)
June 1958	54	142	71	14	(281)
June 1959	69	151	81	15	(316)
June 1960	93	121	90	11	(315)
June 1961	86	145	94	23	(348)
June 1962	79	133	81	21	(314)
June 1963	101	157	71	13	(342)
June 1964	79	193	86	29	(387)
TOTAL	(661)	(1,320)	(765)	(141)	(2,887)

*Graduate or either parent born in Puerto Rico

APPENDIX B-3

HIGH SCHOOL OF FASHION INDUSTRIES
New York City

TABLE B-3

DISTRIBUTION OF GRADUATES
BY ETHNICITY AND BY YEAR

1956 - 1964

(Per Cent)

GRADUATING CLASS	ETHNICITY				TOTAL
	PUERTO* RICAN	NON-PUERTO RICAN			
		BLACK	WHITE	UNKNOWN	
June 1956	20	43	36	1	100
June 1957	14	52	30	4	100
June 1958	19	51	25	5	100
June 1959	22	46	25	5	100
June 1960	30	38	29	3	100
June 1961	25	42	27	6	100
June 1962	25	42	26	7	100
June 1963	29	46	21	4	100
June 1964	20	50	22	8	100

*Graduate or either parent born in Puerto Rico

APPENDIX C

Placement of Graduates, by Ethnicity

HIGH SCHOOL OF FASHION INDUSTRIES

New York, New York

(1956 - 1963 Graduates)

TABLE C-1

PLACEMENT OF HIGH SCHOOL OF FASHION GRADUATES
BY PRIMARY HIGH SCHOOL OF FASHION INDUSTRIES GRADUATES
FOUR-TO-SIX MONTHS AFTER GRADUATION,
AND BY ETHNICITY

Major Industrial Division	Description	NUMBER	
		Black and Puerto Rican Combined	White
	Not employed	293	99
	In Military service	19	7
	Employed; major industrial division not known	67	52
C.	Contract Construction	9	2
D.	Manufacturing	614	120
E.	Transportation and other public utilities	26	17
F.	Wholesale and retail trade	286	149
G.	Finance, insurance, and real estate	22	38
H.	Services	78	41
I.	Government	10	1
	TOTAL:	(1424)	(526)

TABLE C-2

PLACEMENT OF HIGH SCHOOL OF FASHION INDUSTRIES GRADUATES
BY PRIMARY ACTIVITY WHERE EMPLOYED
FOUR-TO-SIX MONTHS AFTER GRADUATION,
AND BY ETHNICITY

Major Industrial Group	Description	NUMBER	
		Black and Puerto Rican Combined	White
	NOT EMPLOYED	293	99
	IN MILITARY SERVICE	19	7
	EMPLOYED; MAJOR INDUSTRIAL GROUP NOT KNOWN	67	52
..	CONTRACT CONSTRUCTION		
15	Building construction	4	--
17	Construction, special trade contractors	5	2
..	MANUFACTURING		
20	Food and kindred products	2	--
22	Textile mill products	27	9
23	Apparel and related products	475	90
24	Lumber and wood products	1	--
25	Furniture and fixtures	9	3
26	Paper and allied products	7	3
27	Printing, publishing and allied industries	12	7
28	Chemicals and allied products	1	1
30	Rubber and miscellaneous plastics	5	--
31	Leather and leather products	26	3
32	Stone, clay and glass products	1	--
34	Fabricated metal products	4	1
35	Machinery	2	--
36	Electrical equipment and supplies	11	--
38	Instruments and related products	3	--
39	Miscellaneous manufacturing industries	28	3
..	TRANSPORTATION AND OTHER PUBLIC UTILITIES		
42	Motor freight transportation and storage	1	2
45	Air transportation	1	--
47	Transportation services	1	2
48	Communications	20	11
49	Electric, gas and sanitary services	3	2

TABLE C-2 (continued)

Major Industrial Group	Description	NUMBER Black and Puerto Rican Combined	NUMBER White
..	WHOLESALE AND RETAIL TRADE		
50	Wholesale trade	41	35
52	Building materials	1	--
53	Retail trade - general merchandise	86	49
54	Food stores	12	2
55	Automotive dealers and gasoline stations	1	--
56	Apparel and accessory stores	117	59
57	Furniture and appliance stores	6	1
58	Easting and drinking places	14	1
59	Miscellaneous retail stores	8	2
..	FINANCE, INSURANCE AND REAL ESTATE		
60	Banking	3	13
61	Credit agencies other than banks	1	3
62	Security dealers	--	1
63	Insurance carriers	7	12
64	Insuranve agents and brokers	--	3
65	Real estate	10	5
67	Holding and investment companies	1	1
..	SERVICES		
70	Hotels and other lodging places	1	--
72	Personal services	20	6
73	Miscellaneous business services	20	16
76	Miscellaneous repair services	2	2
78	Motion pictures	2	1
79	Amusement and recreation services	1	2
80	Medical and health services	23	5
81	Legal services	--	3
82	Educational services	4	2
86	Nonprofit membership organizations	3	1
89	Miscellaneous services	2	3
..	GOVERNMENT		
90	Federal, state and local government	10	1
		(1424)	(526)

TABLE C-3

PLACEMENT OF HIGH SCHOOL OF FASHION INDUSTRIES GRADUATES
BY PRIMARY ACTIVITY WHERE EMPLOYED
FOUR-TO-SIX MONTHS AFTER GRADUATION,
AND BY ETHNICITY

SIC Group No.	Description of Group	NUMBER	
		Black and Puerto Rican Combined	White
	NOT EMPLOYED	293	99
	IN MILITARY SERVICE	19	7
	EMPLOYED; SIC GROUP NO. NOT KNOWN	67	52
...	BUILDING CONSTRUCTION		
151	General building contractors	4	--
...	CONSTRUCTION, SPECIAL TRADE CONTRACTORS		
174	Masonry and stonework	1	--
175	Carpentering and flooring	1	1
179	Miscellaneous trade constructors	3	1
...	FOOD AND KINDRED PRODUCTS		
202	Dairy products	1	--
207	Confectionery and related products	1	--
...	TEXTILE MILL PRODUCTS		
220	Textile mill products	--	1
221	Broad woven fabric mills, cotton	2	1
223	Broad woven fabric mills, wool	1	--
224	Narrow fabrics and other smallwares mills	4	1
225	Knitting mills	17	6
229	Miscellaneous textile goods	3	--
...	APPAREL AND RELATED PRODUCTS		
230	Apparel and other finished products	1	--
231	Men's and boy's suits and coats	32	7
232	Men's and boy's work clothing	15	2
233	Women's outerwear	112	38
234	Women's, misses', children's, etc. under garments	111	20
235	Hats, caps and millinery	16	2
236	Girl's, children's and infants' outerwear	65	14
237	Fur goods	8	1
238	Miscellaneous apparel and accessories	38	2
239	Missellaneous fabricated textile products	77	4

TABLE C-3(continued)

SIC Group No.	Description of Group	NUMBER Black and Puerto Rican Combined	NUMBER White
...	LUMBER AND WOOD PRODUCTS		
249	Miscellaneous wood products	1	--
...	FURNITURE AND FIXTURES		
251	Household furniture	5	1
259	Miscellaneous furniture and fixtures	4	2
...	PAPER AND ALLIED PRODUCTS		
264	Converted paper and paperboard products	6	3
265	Paperboard containers and boxes	1	--
...	PRINTING, PUBLISHING AND ALLIED INDUSTRIES		
272	Periodicals: publishing and printing	2	1
273	Books	1	2
274	Miscellaneous publishing	--	1
275	Commercial printing	4	1
277	Greeting card publishing	1	2
278	Blankbooks and bookbinding	3	--
279	Service industries for printing trades	1	--
...	CHEMICALS AND ALLIED PRODUCTS		
281	Industrial inorganic and organic chemicals	1	--
284	Detergents, cosmetics, other toilet preparations	--	1
...	RUBBER AND MISCELLANEOUS PLASTICS		
307	Miscellaneous plastics	5	--
...	LEATHER AND LEATHER PRODUCTS		
313	Boot and shoe cut stock and findings	2	--
314	Footwear, except rubber	5	--
316	Luggage	1	--
317	Handbags, other personal leather goods	17	2
319	Leather goods, not elsewhere classified	1	1
...	STONE, CLAY AND GLASS PRODUCTS		
323	Glass products, made of purchased glass	1	--
...	FABRICATED METAL PRODUCTS		
344	Fabricated structural metal products	1	--
347	Coating, engraving and allied services	1	1
349	Miscellaneous fabricated metal products	2	--
...	MACHINERY		
354	Metal working machinery and equipment	2	--

TABLE C-3 (continued)

SIC Group No.	Description of Group	NUMBER Black and Puerto Rican Combined	NUMBER White
...	ELECTRICAL EQUIPMENT AND SUPPLIES		
362	Electrical industrial apparatus	1	--
363	Household appliances	2	--
364	Electrical lighting and wiring equipment	2	--
365	Radio and TV receiving sets	2	--
367	Electronic components and accessories	3	--
369	Miscellaneous electrical machinery and supplies	1	--
...	INSTRUMENTS AND RELATED PRODUCTS		
385	Ophthalmic goods	1	--
387	Watches, clocks and parts	2	--
...	MISCELLANEOUS MANUGACTURING INDUSTRIES		
391	Jewelry, silverware and plated ware	2	--
394	Toys and athletic goods	13	--
395	Pens, pencils and other office materials	1	--
396	Costume jewelry, novelties, miscellaneous notions	2	2
399	Miscellaneous manufacturing industries	10	1
...	MOTOR FREIGHT TRANSPORTATION AND STORAGE		
421	Trucking, local and long distance	1	1
422	Public warehousing	--	1
...	AIR TRANSPORTATION		
451	Air transportation carriers	1	--
...	TRANSPORTATION SERVICES		
471	Freight forwarding	1	1
472	Arrangement of transportation	--	1
...	COMMUNICATIONS		
481	Telephone communications	19	10
482	Telegraph communications	--	1
483	Radio broadcasting and television	1	--
...	ELECTRIC, GAS AND SANITARY SERVICES		
493	Combination electric and gas systems	3	2

TABLE C-3 (continued)

SIC Group No.	Description of Group	NUMBER Black and Puerto Rican Combined	White
...	WHOLESALE TRADE		
500	Wholesale trade	1	1
502	Drugs and chemicals	--	5
503	Piece goods, notions and apparel	22	19
504	Groceries and related products	2	--
505	Farm products--raw materials	1	--
506	Electrical goods	1	--
508	Machinery, equipment and supplies	1	--
509	Miscellaneous wholesalers	13	10
...	RETAIL TRADE: BUILDING MATERIALS, HARDWARE, ETC.		
525	Hardware and farm equipment	1	--
...	RETAIL TRADE: GENERAL MERCHANDISE		
531	Department stores	75	33
532	Mail order houses	3	3
533	Variety stores	4	8
534	Merchandise vending machine operators	1	--
535	Direct selling establishments	--	1
539	Miscellaneous general merchandise stores	3	4
...	FOOD STORES		
541	Grocery stores	8	2
542	Meat and fish markets	2	--
544	Candy, nut and confectionery stores	2	--
...	AUTOMOTIVE DEALERS AND GASOLINE SERVICE STATIONS		
551	Motor vehicle dealers (new and used cars)	1	--
...	APPAREL AND ACCESSORY STORES		
561	Men's and boys' clothing stores	18	1
562	Women's ready-to-wear stores	70	46
563	Women's accessory and specialty stores	16	4
564	Children's and infants' wear stores	1	--
565	Family clothing stores	3	1
566	Shoe stores	2	2
567	Custom tailors	4	5
568	Furrier and fur shops	3	--

TABLE C-3 (continued)

SIC Group No.	Description of Group	NUMBER Black and Puerto Rican Combined	NUMBER White
...	FURNITURE AND APPLIANCE STORES		
571	Furniture and home furnishing stores	4	1
572	Household appliance stores	1	--
573	Radio, television, and music stores	1	--
...	EATING AND DRINKING PLACES		
581	Eating and drinking places	14	1
...	MISCELLANEOUS RETAIL STORES		
591	Drugstores	3	--
592	Liquor stores	2	--
593	Antique stores and secondhand stores	2	--
594	Book and stationery stores	--	1
597	Jewelry stores	1	--
599	Miscellaneous retail stores	--	1
...	BANKING		
602	Commercial and stock savings banks	2	12
605	Banking-connected establishments	1	1
...	CREDIT AGENCIES OTHER THAN BANKS		
612	Saving and loan associations	--	1
614	Personal credit institutions	--	1
615	Business credit institutions	1	1
...	SECURITY DEALERS		
621	Security brokers and dealers	--	1
...	INSURANCE CARRIERS		
631	Life insurance companies	6	8
632	Accident and health insurance companies	1	1
633	Fire, marine and casualty insurance	--	3
...	INSURANCE AGENTS AND BROKERS		
641	Insurance agents, brokers and service	--	3
...	REAL ESTATE		
651	Real estate operators	10	5
...	HOLDING AND INVESTMENT COMPANIES		
671	Holding companies	1	--
679	Miscellaneous investing institutions	--	1
...	HOTELS AND OTHER LODGING PLACES		
702	Rooming and boarding houses	1	--

TABLE C-3 (continued)

SIC Group No.	Description of Group	NUMBER	
		Black and Puerto Rican Combined	White
...	PERSONAL SERVICES		
721	Laundry services, cleaning and dyeing plants	5	1
722	Photographic studios	4	--
723	Beauty shops	2	2
724	Barber shops	1	2
727	Garment pressing, alterations and repair	6	1
729	Miscellaneous personal services	6	--
...	MISCELLANEOUS BUSINESS SERVICES		
731	Advertising	--	1
732	Consumer and merchantile credit reporting	1	3
733	Duplicating, addressing, mailing list services	1	1
739	Miscellaneous business services	14	11
...	MISCELLANEOUS REPAIR SERVICES		
764	Reupholstery and furniture repair	2	2
...	MOTION PICTURES		
783	Motion picture theaters	2	1
...	AMUSEMENT AND RECREATION SERVICES		
792	Theatrical producers, bands, orchestras, entertainers	1	1
794	Sports promoters and commercial operators	--	1
...	MEDICAL AND HEALTH SERVICES		
801	Offices of physicians and surgeons	3	1
806	Hospitals	19	3
807	Medical and dental laboratories	--	1
809	Health and allied services, not elsewhere classified	1	--
...	LEGAL SERVICES		
811	Legal services	--	3
...	EDUCATIONAL SERVICES		
821	Elementary and secondary schools	2	--
822	Colleges, universities, professional schools, etc.	1	1
824	Correspondence and vocational schools	1	1

TABLE C-3 (continued)

SIC Group No.	Description of Group	NUMBER	
		Black and Puerto Rican Combined	White
...	NONPROFIT MEMBERSHIP ORGANIZATIONS		
864	Civic, social and fraternal associations	1	--
866	Religious organizations	1	--
867	Charitable organizations	1	1
...	MISCELLANEOUS SERVICES		
892	Nonprofit educational and research agencies	1	1
899	Services, not elsewhere classified	1	2
...	GOVERNMENT		
901	Federal, state and local government	10	1
	TOTAL:	(1,424)	(526)

TABLE C-4

HIGH SCHOOL OF FASHION INDUSTRIES
PROPORTIONS OF GRADUATES EMPLOYED IN TRADE-RELATED WORK,
BY CURRICULUM AND BY ETHNICITY

(Four-to-six months after high school graduation)

	ETHNICITY			
Curriculum	Black	Puerto Rican	White	Total
Garment Operator	.70 (289)	.74 (84)	.48 (73)	.67 (446)
Trade Dressmaking	.75 (169)	.77 (145)	.54 (124)	.70 (438)
Fashion Design	.57 (30)	.65 (34)	.60 (43)	.61 (107)
Fashion Design Technical	-------.59------ (42)		.60 (67)	.63 (67)
TOTALS: NUMBER:	.70 (488)	.74 (263)	.55 (307)	.67 (1100)

1. Bases appear in parentheses below proportions.

As defined here, trade-related means employment in any of the following nine industries:

SIC	Industry
23	Apparel and Other Textile Products
503	Dry Goods and Apparel - Wholesale
56	Apparel and Accessory Stores
53	Retail General Merchandise
22	Textile Mill Products
31	Leather and Leather Products
25	Furniture and Fixtures
727	Garment Pressing, Alteration, and Repair
30	Rubber and Plastic Products

TABLE C-5

SIC CLASSIFICATION OF GRADUATES IN TRADE-RELATED EMPLOYMENT, BY CURRICULUM AND BY ETHNICITY

(Four-to-six months after high school graduation)

SIC CODE	Primary Activity of Firm	CURRICULUM: Garment Operating Black & PR	Garment Operating White	Trade Dressmaking Black & PR	Trade Dressmaking White	Fashion Design Black & PR	Fashion Design White	Fashion Design-Technical Black & PR	Fashion Design-Technical White
23	Apparel manufacturing	.76	.46	.60	.28	.65	.42	.34	.18
56	Apparel retail	.08	.29	.21	.37	.20	.15	.17	.25
53	General retail	.06	.14	.10	.18	.05	.27	.34	.43
503	Apparel wholesale	.02	.03	.03	.04	--	.15	.10	.08
22	Textile mill products manufacturing	.03	.06	.02	.07	.08	--	--	.05
31	Leather products manufacturing	.04	.03	.03	.01	.03	--	.03	--
25	Furniture manufacturing	.01	--	a	.03	--	--	--	.03
727	Garment pressing, repair and alternations	--	--	.01	--	--	--	--	--
30	Rubber and plastics manufacturing	.01	--	a	--	--	--	--	--
	TOTAL: (NUMBER)	1.01 (262)	1.01 (35)	1.00 (238)	.98 (67)	1.01 (40)	.99 (26)	.98 (29)	1.02 (40)

a Proportion less than .005.

APPENDIX D

Placement of Graduates, by Ethnicity

AUTOMOTIVE HIGH SCHOOL

Brooklyn, New York

(1960 - 1964 Graduates)

TABLE D-1

PLACEMENT OF AUTOMOTIVE HIGH SCHOOL GRADUATES BY PRIMARY ACTIVITY WHERE EMPLOYED FOUR-TO-SIX MONTHS AFTER GRADUATION BY ETHNICITY

Major Industrial Division	Description	NUMBER	
		Black and Puerto Rican	White
	NOT EMPLOYED	41	67
	IN MILITARY SERVICE	68	69
	EMPLOYED; MAJOR INDUSTRIAL DIVISION NOT KNOWN	12	19
A.	Agriculture, forestry, and fisheries	1	3
B.	Mining	--	1
C.	Contract construction	2	21
D.	Manufacturing	98	61
E.	Transportation and other public utilities	7	15
F.	Wholesale and retail trade	89	188
G.	Finance, insurance, and real estate	7	16
H.	Services	62	80
I.	Government	3	5
	TOTAL:	(390)	(545)

TABLE D-2

PLACEMENT OF AUTOMOTIVE HIGH SCHOOL GRADUATES BY PRIMARY ACTIVITY WHERE EMPLOYED FOUR-TO-SIX MONTHS AFTER GRADUATION BY ETHNICITY

Major Industrial Group	Description	NUMBER	
		Black and Puerto Rican	White
	NOT EMPLOYED	41	67
	IN MILITARY SERVICE	68	69
	EMPLOYED; MAJOR INDUSTRIAL GROUP NOT KNOWN	12	19
..	AGRICULTURE, FORESTRY, AND FISHERIES		
01	Agricultural production	1	1
07	Agricultural services, hinting and trapping	--	2
..	MINING		
14	Mining and quarring - nonmetalic minerals	--	1
..	CONTRACT CONSTRUCTION		
15	Building construction	--	3
16	Construction other than buildings	--	3
17	Construction, special trade contractors	2	15
..	MANUFACTURING		
20	Food and kindred products	1	8
22	Textile mill products	2	--
23	Apparel and related products	17	6
24	Lumber and wood products	2	--
25	Furniture and fixtures	1	2
26	Paper and allied products	5	1
27	Printing, publishing and allied industries	12	7
28	Chemicals and allied products	3	1
30	Rubber and miscellaneous plastics	3	3
31	Leather and leather products	1	1
32	Stone, clay and glass products	--	1
33	Primary metal industries	--	2
34	Fabricated metal products	12	8
35	Machinery	8	7
36	Electrical equipment and supplies	12	6
37	Transportation equipment	9	5
38	Instruments and related products	4	1
39	Miscellaneous manufacturing industries	6	2

TABLE D-2 (continued)

Major Industrial Group	Description	NUMBER	
		Black and Puerto Rican	White
..	TRANSPORTATION AND OTHER PUBLIC UTILITIES		
41	Local and interurban passenger transit	2	1
42	Motor freight transportation and storage	3	8
44	Water transportation	--	1
45	Air transportation	--	1
48	Communications	1	1
49	Electric, gas, and sanitary services	1	3
..	WHOLESALE AND RETAIL TRADE		
50	Wholesale trade	29	47
52	Building materials	--	1
53	Retail trade - general merchandise	13	11
54	Food stores	13	15
55	Automotive dealers and gasoline service stations	18	100
56	Apparel and accessory stores	10	2
57	Furniture and appliance stores	1	2
58	Eating and drinking places	2	5
59	Miscellaneous retail stores	3	5
..	FINANCE, INSURANCE AND REAL ESTATE		
60	Banking	2	7
62	Security dealers	2	4
63	Insurance carriers	2	1
64	Insurance agents and brokers	--	2
65	Real estate	1	1
67	Holding and investment companies	--	1
..	SERVICES		
72	Personal services	5	6
73	Miscellaneous business services	13	5
75	Automobile repair, services and garages	30	60
76	Miscellaneous repair services	1	--
79	Amusement and recreation services	--	2
80	Medical and health services	9	2
81	Legal services	--	1
82	Educational services	1	--
86	Nonprofit membership organizations	2	2
89	Miscellaneous services	1	2
..	GOVERNMENT		
90	Federal, state and local government	3	5
	TOTAL:	(390)	(545)

TABLE D-3

PLACEMENT OF AUTOMOTIVE HIGH SCHOOL GRADUATES BY PRIMARY ACTIVITY WHERE EMPLOYED FOUR-TO-SIX MONTHS AFTER GRADUATION BY ETHNICITY

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
	NOT EMPLOYED	41	67
	IN MILITARY SERVICE	68	69
	EMPLOYED; SIC GROUP NO. NOT KNOWN	12	19
...	AGRICULTURAL PRODUCTION		
019	Farms	1	1
...	AGRICULTURAL SERVICES, HUNTING AND TRAPPING		
073	Horticultural services	--	2
...	MINING AND QUARRYING - NONMETALIC MINERALS		
144	Sand and gravel	--	1
...	BUILDING CONSTRUCTION		
151	General building contractors	--	3
...	CONSTRUCTION OTHER THAN BUILDINGS		
161	Highway and street construction	--	1
162	Heavy construction	--	2
...	CONSTRUCTION, SPECIAL TRADE CONTRACTORS		
171	Plumbing, heating and air conditioning	--	8
172	Painting and decorating	--	1
174	Masonry and stonework	--	1
175	Carpentering and flooring	1	2
176	Roofing and sheet metal work	--	1
179	Miscellaneous trade constructors	1	2
...	FOOD AND KINDRED PRODUCTS		
202	Dairy products	--	1
205	Bakery products	--	3
206	Sugar	--	1
208	Beverages	1	1
209	Miscellaneous food products	--	2

TABLE D-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
...	TEXTILE MILL PRODUCTS		
225	Knitting mills	2	--
...	APPAREL AND RELATED PRODUCTS		
231	Men's and boys' suits and coats	--	3
232	Men's and boys' work clothing	1	--
233	Women's outerwear	1	3
235	Hats, caps and millinery	3	--
236	Girls' outerwear	1	--
237	Fur goods	3	--
238	Miscellaneous apparel and accessories	4	--
239	Miscellaneous fabricated textile products	4	--
...	LUMBER AND WOOD PRODUCTS		
243	Millwork and prefabricated products	1	--
249	Miscellaneous wood products	1	--
...	FURNITURE AND FIXTURES		
251	Household furniture	--	2
254	Office and store fixtures	1	--
...	PAPER AND ALLIED PRODUCTS		
263	Paperboard mills	1	--
264	Converted paper and paperboard products	2	--
265	Paperboard containers and boxes	2	1
...	PRINTING, PUBLISHING AND ALLIED INDUSTRIES		
272	Periodicals: publishing and printing	1	--
274	Miscellaneous publishing	--	1
275	Commercial printing	5	4
277	Greeting card publishing	4	--
278	Blankbooks and bookbinding	2	--
279	Service industries for printing trades	--	2
...	CHEMICALS AND ALLIED PRODUCTS		
283	Drugs	1	--
284	Detergents, cosmetics and other toilet preparations	2	--
289	Miscellaneous chemical products	--	1
...	RUBBER AND MISCELLANEOUS PLASTIC		
302	Rubber footwear	1	--
307	Miscellaneous plastics	2	3

TABLE D-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
...	LEATHER AND LEATHER PRODUCTS		
317	Handbags and other personal leather goods	1	1
...	STONE, CLAY AND GLASS PRODUCTS		
327	Concrete, gypsum and plaster products	--	1
...	PRIMARY METAL INDUSTRIES		
335	Rolling, drawing, excruding of non-ferrous metals	--	2
...	FABRICATED METAL PRODUCTS		
342	Cutlery, handtools, and general hardware	1	1
344	Fabricated structural metal products	3	3
345	Screw machine products; bolts, nuts, etc.	--	3
346	Metal stampings	2	--
347	Coating, engraving, and allied services	5	--
348	Miscellaneous fabricated wire products	1	--
349	Miscellaneous fabricated metal products	--	1
...	MACHINERY		
353	Construction and materials handling machinery	1	--
354	Metal working machinery and equipment	1	3
357	Office, computing, and accounting machines	--	1
358	Service industry machines	1	1
359	Miscellaneous machinery	5	2
...	ELECTRICAL EQUIPMENT AND SUPPLIES		
362	Electrical industrial apparatus	--	3
364	Electrical lighting and wiring equipment	3	1
365	Radio and TV receiving sets	2	--
366	Communication equipment	1	--
367	Electronic components and accessories	3	1
369	Miscellaneous electrical machinery and supplies	3	1
...	TRANSPORTATION EQUIPMENT		
371	Motor vehicles and motor vehicle equipment	8	5
375	Motorcycles, bicycles, and parts	1	--

TABLE D-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
...	INSTRUMENTS AND RELATED PRODUCTS		
381	Engineering and scientific instruments	--	1
384	Surgical, medical, and dental equipment	2	--
386	Photographic equipment and supplies	1	--
387	Watches, clocks, and parts	1	--
...	MISCELLANEOUS MANUFACTURING INDUSTRIES		
391	Jewelry, silverware, and plated ware	1	1
394	Toys and athletic goods	1	--
395	Pens, pencils, and other office materials	1	--
399	Miscellaneous manufacturing industries	3	1
...	LOCAL AND INTERURBAN PASSENGER TRANSIT		
412	Taxicabs	1	1
415	School busses	1	--
...	MOTOR FREIGHT TRANSPORTATION AND STORAGE		
421	Local and long distance trucking	3	8
...	WATER TRANSPORTATION		
441	Deep sea foreign transportation	--	1
...	AIR TRANSPORTATION		
451	Air transportation carriers	--	1
...	COMMUNICATIONS		
481	Telephone communications	--	1
482	Telegraph communications	1	--
...	ELECTRIC, GAS, AND SANITARY SERVICES		
492	Gas companies and systems	--	1
493	Combination electric and gas systems	1	2
...	WHOLESALE TRADE		
501	Motor vehicles and automotive equipment	10	26
502	Drugs and chemicals	--	1
503	Piece goods, notions and apparel	5	2
504	Groceries and related products	2	1
506	Electrical goods	--	3
507	Hardware, plumbing and heating supplies	--	1
508	Machinery, equipment and supplies	4	5
509	Miscellaneous wholesalers	8	8

TABLE D-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
...	BUILDING MATERIALS		
523	Paint, glass and wallpaper stores	--	1
...	RETAIL TRADE - GENERAL MERCHANDISE		
531	Department stores	10	9
532	Mail order houses	2	--
533	Variety stores	--	1
535	Direct selling establishments	--	1
539	Miscellaneous general merchandise stores	1	--
...	FOOD STORES		
541	Grocery stores	10	10
542	Meat and fish markets	2	2
543	Fruit and begetable stores	--	1
544	Candy, nut and confectionery stores	--	1
545	Dairy products stores	1	--
546	Retail bakeries	--	1
...	AUTOMOTIVE DEALERS AND GASOLINE SERVICE STATIONS		
551	Motor vehicle dealers (new & used cars)	2	38
552	Motor vehicle dealers (used cars only)	1	1
553	Tire, battery and accessory dealers	7	8
554	Gasoline service stations	8	52
559	Misc. aircraft, marine & auto dealers	--	1
...	APPAREL AND ACCESSORY STORES		
561	Men's and boys' clothing stores	3	1
562	Women's ready-to-wear stores	1	1
563	Women's accessory * specialty stores	2	--
565	Family clothing stores	2	--
566	Shoe stores	2	--
...	FURNITURE AND APPLIANCE STORES		
571	Furniture & home furnishings stores	1	2
...	EATING AND DRINKING PLACES		
581	Eating and drinking places	2	5
...	MISCELLANEOUS RETAIL STORES		
591	Drugstores	--	1
592	Liquor stores	1	--
594	Book and stationery stores	--	1
596	Farm and garden supply sotres	--	1
599	Miscellaneous retail stores	2	2

TABLE D-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
...	BANKING		
602	Commercial and stock savings banks	1	4
603	Mutual savings banks	--	1
605	Banking-connected establishments	1	2
...	SECURITY DEALERS		
621	Security brokers and dealers	2	4
...	INSURANCE CARRIERS		
631	Life insurance companies	1	--
632	Accident & health insurance companies	--	1
639	Miscellaneous insurance carriers	1	--
...	INSURANCE AGENTS AND BROKERS		
641	Insurance agents, brokers & service	--	2
...	REAL ESTATE		
651	Real estate operators	1	1
...	HOLDING AND INVESTMENT COMPANIES		
671	Holding companies	--	1
...	PERSONAL SERVICES		
721	Laundry services, cleaning and dyeing plants	3	2
722	Photographic studios	1	1
723	Beauty shops	1	1
727	Garment pressin, alternation and repair	--	1
729	Miscellaneous personal services	--	1
...	MISCELLANEOUS BUSINESS SERVICES		
731	Advertising	--	2
733	Duplicating, addressing & mailing list services	4	--
734	Services to buildings	1	--
739	Miscellaneous business services	8	3
...	AUTOMOBILE REPAIR, SERVICES AND GARAGES		
751	Automobile rentals	1	3
752	Automobile parking	1	1
753	Automobile repair shops	28	56
...	MISCELLANEOUS REPAIR SERVICES		
769	Miscellaneous repair shops	1	--

TABLE D-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
...	AMUSEMENT AND RECREATION SERVICES		
794	Sports promoters & recreation services	--	2
...	MEDICAL AND HEALTH SERVICES		
806	Hospitals	8	1
807	Medical and dental laboratories	1	1
...	LEGAL SERVICES		
811	Legal services	--	1
...	EDUCATIONAL SERVICES		
824	Correspondence schools & vocational schools	1	--
...	NONPROFIT MEMBERSHIP ORGANIZATIONS		
861	Business associations	--	1
864	Civic, social & fraternal associations	1	--
865	Political organizations	--	1
869	Miscellaneous nonprofit membership organizations	1	--
...	MISCELLANEOUS SERVICES		
891	Engineering & architectural services	--	2
899	Services not elsewhere classified	1	--
...	GOVERNMENT		
9XX	City, state & federal government	3	5
	TOTAL:	(390)	(545)

APPENDIX E

Placement of Graduates, by Ethnicity

SAMUEL GOMPERS VOCATIONAL-TECHNICAL HIGH SCHOOL

New York, New York

(1960 - 1964 Graduates)

TABLE E-1

PLACEMENT OF GOMPERS HIGH SCHOOL GRADUATES BY PRIMARY ACTIVITY WHERE EMPLOYED FOUR-TO-SIX MONTHS AGTER GRADUATION BY ETHNICITY

Major Industrial Division	Description	NUMBER	
		Black Puerto Rican	White
	Not employed	60	81
	In military service	98	45
	Employed; Major industrial division not known	17	14
C.	Contract construction	36	53
D.	Manufacturing	90	52
E.	Transportation & other public utilities	14	16
F.	Wholesale and retail trade	103	90
G.	Finance, insurance, and real estate	7	14
H.	Services	35	41
I.	Government	2	4
	TOTAL:	(462)	(410)

Note: 11 cases omitted from tabulations because ethnicity not known.

TABLE E-2

PLACEMENT OF GOMPERS HIGH SCHOOL GRADUATES BY PRIMARY ACTIVITY WHERE EMPLOYED FOUR-TO-SIX MONTHS AFTER GRADUATION BY ETHNICITY

Major Industrial Group	Description	NUMBER	
		Black and Puerto Rican	White
	NOT EMPLOYED.	60	81
	IN MILITARY SERVICE	98	45
	EMPLOYED; MAJOR INDUSTRIAL GROUP NOT KNOWN. . .	17	14
..	CONTRACT CONSTRUCTION		
15	Building construction.	4	4
17	Construction, special trade contractors	32	49
..	MANUFACTURING		
19	Ordnance and accessories.	--	2
20	Food and kindred products.	--	2
23	Apparel and related products	14	2
25	Furniture and fixtures	1	--
26	Paper and allied products.	1	2
27	Printing, publishing and allied industries .	6	6
30	Rubber and miscellaneous plastics.	1	--
31	Leather and leather products	1	--
34	Fabricated metal products.	9	5
35	Machinery except electrical.	4	6
36	Electrical equipment and supplies.	36	22
37	Transportation equipment	4	2
38	Instruments and related products	3	1
39	Miscellaneous manufacturing industries . . .	10	2
..	TRANSPORTATION AND OTHER PUBLIC UTILITIES		
41	Local and suburban transit	3	2
42	Motor freight transportation and storage . .	2	2
44	Water transportation	--	1
47	Transportation services.	2	--
48	Communications	6	7
49	Electric, gas and sanitary services.	1	4

TABLE E-2 (continued)

Major Industrial Group	Description	NUMBER Black and Puerto Rican	White
..	WHOLESALE AND RETAIL TRADE		
50	Wholesale trade	29	17
52	Building materials	1	3
53	Retail trade: general merchandise	24	12
54	Food stores	15	26
55	Automotive dealers & gasoline service stations	10	7
56	Apparel and accessory stores	16	6
57	Furniture and appliance stores	1	5
58	Eating and drinking places	3	3
59	Miscellaneous retail stores	4	11
..	FINANCE, INSURANCE AND REAL ESTATE		
60	Banking	2	6
61	Credit agencies other than banks	--	1
62	Security dealers	--	5
63	Insurance carriers	3	--
64	Insurance agents and brokers	1	--
65	Real estate	1	2
..	SERVICES		
70	Hotels, rooming houses, camps, other lodging places	--	2
72	Personal services	2	1
73	Miscellaneous business services	6	6
75	Automobile repair services and garages	2	2
76	Miscellaneous repair services	10	15
78	Motion pictures	1	2
79	Amusement and recreation services	--	2
80	Medical and health services	8	2
81	Legal services	--	2
82	Educational services	4	2
84	Museums, art galleries, botanical & zoological gardens	--	2
86	Nonprofit membership organizations	2	3
..	GOVERNMENT		
90	Federal, state and local government	2	4
	TOTAL:	(462)	(410)

Note: 11 cases omitted from tabulations because ethnicity not known.

TABLE E-3

PLACEMENT OF GOMPERS HIGH SCHOOL GRADUATES BY PRIMARY ACTIVITY WHERE EMPLOYED FOUR-TO-SIX MONTHS AFTER GRADUATION BY ETHNICITY

SIC Group No.	Description	NUMBER Black and Puerto Rican	White
	NOT EMPLOYED.	60	81
	IN MILITARY SERVICE	98	45
	EMPLOYED; SIC GROUP NO. NOT KNOWN	17	14
...	BUILDING CONSTRUCTION		
151	General building contractors	4	4
...	CONSTRUCTION, SPECIAL TRADE CONTRACTORS		
171	Plumbing, heating and air conditioning . . .	1	3
172	Painting and decorating.	--	2
173	Electrical work.	29	41
175	Carpentering and flooring.	--	1
176	Roofing and sheet metal work	--	1
179	Miscellaneous trade contractors.	2	1
...	ORDNANCE AND ACCESSORIES		
193	Tanks and tank components.	--	1
199	Miscellaneous ordnance and accessories . . .	--	1
...	FOOD AND KINDRED PRODUCTS		
208	Beverages	--	1
209	Miscellaneous food products.	--	1
...	APPAREL AND RELATED PRODUCTS		
231	Men's and boys' suits and coats.	2	--
233	Women's outerwear.	5	--
234	Women's and children's undergarments	--	1
235	Hats, caps and millinery	1	--
237	Fur goods	1	--
238	Miscellaneous apparel and accessories. . . .	2	--
239	Miscellaneous fabricated textile products. .	3	1
...	FURNITURE AND FIXTURES		
251	Household furniture.	1	--

TABLE E-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	White
...	PAPER AND ALLIED PRODUCTS		
264	Converted paper and paperboard products . .	--	2
265	Paperboard containers and boxes	1	--
...	PRINTING, PUBLISHING AND ALLIED INDUSTRIES		
271	Newspapers: publishing and printing	1	--
272	Periodicals: publishing and printing. . . .	--	1
273	Books	1	3
275	Commercial printing	1	1
277	Greeting card publishing.	1	--
278	Blank books and book binding.	--	1
279	Service industries for printing trades. . .	2	--
...	RUBBER AND MISCELLANEOUS PLASTICS		
307	Miscellaneous plastics.	1	--
...	LEATHER AND LEATHER PRODUCTS		
316	Luggage	1	--
...	FABRICATED METAL PRODUCTS		
341	Metal cans.	--	1
343	Heating and plumbing equipment, except electric.	2	--
344	Fabricated structural metal products. . . .	3	--
345	Screw machine products: bolts, nuts, etc...	1	--
346	Metal stampings	2	--
347	Coating, engraving and allied services. . .	1	2
348	Miscellaneous fabricated wire products. . .	--	1
349	Miscellaneous fabricated metal products . .	--	1
...	MACHINERY		
353	Construction and materials handling machinery	--	3
354	Metal working machinery and equipment . . .	1	1
356	General industrial machinery and equipment.	1	1
357	Office computing and accounting machines. .	--	1
358	Service industry machines	1	--
359	Miscellaneous machinery except electrical .	1	--
...	ELECTRICAL EQUIPMENT AND SUPPLIES		
361	Electric transmission and distribution equipment	1	3
362	Electrical industrial apparatus	--	1
363	Household appliances.	5	2
364	Electrical lightning and wiring equipment .	6	3
365	Radio and TV receiving sets	14	4

TABLE E-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	White
366	Communication equipment.	5	6
367	Electronic components and accessories. . . .	2	3
369	Miscellaneous electrical machinery and supplies	3	--
...	TRANSPORTATION EQUIPMENT		
371	Motor vehicles and motor vehicle equipment .	3	1
373	Ship and boat building and repairing	1	1
...	INSTRUMENTS AND RELATED PRODUCTS		
381	Engineering and scientific instruments . . .	1	--
384	Surgical, medical and dental equipment . . .	--	1
385	Opthalmic goods.	1	--
387	Watches, clocks and parts.	1	--
...	MISCELLANEOUS MANUFACTURING INDUSTRIES		
391	Jewelry, silverware and plated ware.	2	--
393	Musical instruments.	1	--
394	Toys and athletic goods.	2	1
396	Costume jewelry, novelties, buttons, misc. notions.	2	1
399	Miscellaneous manufacturing industries . . .	3	--
...	LOCAL AND INTERURBAN PASSENGER TRANSIT		
411	Local and suburban passenger transportation.	--	1
412	Taxi cabs.	3	1
...	MOTOR FREIGHT TRANSPORTATION AND STORAGE		
421	Trucking: local and long distance.	1	2
422	Public warehousing	1	--
...	WATER TRANSPORTATION		
446	Services incidental to water transportation.	--	1
...	TRANSPORTATION SERVICES		
472	Arrangement of transportation.	2	--
...	COMMUNICATIONS		
481	Telephone communications	2	--
482	Telegraph communications	2	--
...	ELECTRIC, GAS, AND SANITARY SERVICES		
493	Combination electric and gas systems	1	4

TABLE E-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	White
...	WHOLESALE TRADE		
501	Motor vehicles and automotive equipment	3	2
502	Drugs and chemicals	--	1
503	Piece goods, notions and apparel	5	1
504	Groceries and related products	1	2
506	Electrical goods	7	6
508	Machinery, equipment and supplies	2	1
509	Miscellaneous wholesalers	11	4
...	BUILDING MATERIALS		
521	Lumber & other building materials dealers	--	1
522	Plumbing, heating and air conditioning equipment dealers	--	1
525	Hardware and farm equipment	1	1
...	RETAIL TRADE - GENERAL MERCHANDISE		
531	Department stores	20	8
532	Mail order houses	--	1
533	Variety stores	1	1
535	Direct selling establishments	1	2
539	Miscellaneous general merchandising stores	2	--
...	FOOD STORES		
541	Grocery stores	12	22
542	Meat and fish stores	3	2
544	Candy, nut and confectionary stores	--	2
...	AUTOMOTIVE DEALERS AND GASOLINE SERVICE STATIONS		
551	Motor vehicle dealers, new and used cars	2	--
553	Tire, battery and accessory dealers	2	5
554	Gasoline service stations	6	2
...	APPAREL AND ACCESSORY STORES		
561	Men's and boys' clothing stores	4	3
562	Women's ready-to-wear stores	7	3
563	Women's accessory and specialty stores	1	--
565	Family clothing stores	3	--
566	Shoe stores	1	--
...	FURNITURE AND APPLIANCE STORES		
571	Furniture and home furnishing stores	1	3
572	Household appliance stores	--	1
573	Radio, TV and music stores	--	1

TABLE E-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	White
...	EATING AND DRINKING PLACES		
581	Eating and drinking places	3	3
...	MISCELLANEOUS RETAIL STORES		
591	Drug stores	--	5
592	Liquor stores	--	1
593	Antique stores and secondhand stores	1	--
594	Book and stationery stores	1	--
595	Sporting goods stores and bicycle shops	1	1
597	Jewelry stores	--	1
598	Fuel and ice dealers	--	1
599	Miscellaneous retail stores	1	2
...	BANKING		
602	Commercial and stock savings banks	2	5
603	Mutual savings banks	--	1
...	CREDIT AGENCIES OTHER THAN BANKS		
614	Personal credit institutions	--	1
...	SECURITY DEALERS		
621	Security brokers and dealers	--	2
623	Security and commodity exchanges	--	3
...	INSURANCE CARRIERS		
631	Life insurance companies	1	--
632	Accident and health insurance companies	1	--
633	Fire, marine and casualty insurance	1	---
...	INSURANCE AGENTS AND BROKERS		
641	Insurance agents, brokers and service	1	--
...	REAL ESTATE		
651	Real estate operators	1	2
...	HOTELS, ROOMING HOUSES, CAMPS, AND OTHER LODGING PLACES		
701	Hotels, tourist courts and motels	--	2
...	PERSONAL SERVICES		
721	Laundry services, cleaning & dyeing plants	1	--
722	Photographic studios	--	1
729	Miscellaneous personal services	1	--

TABLE E-3 (continued)

SIC Group No.	Description	NUMBER Black and Puerto Rican	NUMBER White
...	MISCELLANEOUS BUSINESS SERVICES		
733	Duplicating, addressing and mailing list services.	--	2
739	Miscellaneous business services	6	4
...	AUTOMOBILE REPAIR, SERVICES AND GARAGES		
753	Automobile repair shops	2	2
...	MISCELLANEOUS REPAIR SERVICES		
762	Electrical repair shops	7	9
769	Miscellaneous repair shops.	3	6
...	MOTION PICTURES		
783	Motion picture theaters	1	2
...	AMUSEMENT AND RECREATION SERVICES		
792	Theatrical producers, bands, orchestras and entertainers.	--	1
794	Sports promoters and recreation services.	--	1
...	MEDICAL AND HEALTH SERVICES		
806	Hospitals	7	2
809	Miscellaneous health and applied services	1	--
...	LEGAL SERVICES		
811	Legal services.	--	2
...	EDUCATIONAL SERVICES		
822	College, universities, professional schools	3	1
824	Correspondence and vocational schools	1	--
829	Miscellaneous schools and educational services.	--	1
...	MUSEUMS, ART GALLERIES, BOTANICAL & ZOOLOGICAL GARDENS		
842	Arboreta, botanical and zoological gardens.	--	2
...	NONPROFIT MEMBERSHIP ORGANIZATIONS		
864	Civic, social and fraternal associations.	--	2
866	Religious organizations	2	1
...	GOVERNMENT		
9XX	City, state and federal government.	2	4
	TOTAL:	(462)	(410)

Note: 11 cases omitted from tabulations because ethnicity not known.

APPENDIX F-1

TABLE F-1

PROPORTION OF GARMENT OPERATORS CLASSIFIED AS "HIGH-EARNERS" IN SECOND QUARTER, BY EARNINGS IN FIRST QUARTER AND BY ETHNICITY*

BLACKS N = 383	First Quarter	Second Quarter: Low Earners	Second Quarter: High Earners	(Total)
	Low Earner	.75	.25	(1.00 = 321)
	High Earner	.34	.66	(1.00 = 62)

PUERTO RICANS N = 108	First Quarter	Second Quarter: Low Earner	Second Quarter: High Earner	(Total)
	Low Earner	.70	.30	(1.00 = 74)
	High Earner	.32	.68	(1.00 = 34)

WHITES N = 84	First Quarter	Second Quarter: Low Earner	Second Quarter: High Earner	(Total)
	Low Earner	.52	.48	(1.00 = 58)
	High Earner	.19	.81	(1.00 = 26)

* Graduates who earned more than $470 in a quarter are classified as "high-earners"; those earning $470 or less are classified as "low-earners." The figure $470 is the median first quarter earnings of all graduates between 1956-1963, including those with no earnings reported in the quarter.

APPENDIX F-2

TABLE F-2

PROPORTION OF TRADE DRESSMAKING GRADUATES CLASSIFIED AS "HIGH-EARNERS" IN SECOND QUARTER, BY EARNINGS IN FIRST QUARTER AND BY ETHNICITY*

BLACKS N = 209	First Quarter	Second Quarter: Low Earners	Second Quarter: High Earners	(Total)
	Low Earner	.66	.34	(1.00 = 157)
	High Earner	.21	.79	(1.00 = 52)

PUERTO RICANS N = 169	First Quarter	Second Quarter: Low Earner	Second Quarter: High Earner	(Total)
	Low Earner	.58	.42	(1.00 = 108)
	High Earner	.18	.82	(1.00 = 61)

WHITES N = 137	First Quarter	Second Quarter: Low Earner	Second Quarter: High Earner	(Total)
	Low Earner	.43	.57	(1.00 = 82)
	High Earner	.04	.96	(1.00 = 55)

* Graduates who earned more than $470 in a quarter are classified as "high-earners"; those earning $470 or less are classified as "low-earners." The figure $470 is the median first quarter earnings of all graduates between 1956-1963, including those with no earnings reported in a quarter.

TABLE F-3

PROPORTION OF FASHION DESIGN (TECHNICAL) GRADUATES CLASSIFIED AS "HIGH-EARNERS" IN SECOND QUARTER, BY EARNINGS IN FIRST QUARTER AND BY ETHNICITY*

BLACKS AND PUERTO RICANS COMBINED N = 58	First Quarter	Second Quarter: Low Earner	Second Quarter: High Earner	(Total)
	Low Earner	.69	.31	(1.00 = 42)
	High Earner	.25	.75	(1.00 = 16)

WHITES N = 104	First Quarter	Second Quarter: Low Earner	Second Quarter: High Earner	(Total)
	Low Earner	.66	.34	(1.00 = 74)
	High Earner	.33	.67	(1.00 = 30)

* Graduates who earned more than $470 in a quarter are classified as "high-earners"; those earning $470 or less are classified as "low-earners". The figure $470 is the median first quarter earnings of all graduates between 1956-1963, including those with no earnings reported in a quarter.

APPENDIX F-4

TABLE F-4

PROPORTION OF FASHION DESIGN GRADUATES CLASSIFIED AS "HIGH-EARNERS IN SECOND QUARTER, BY EARNINGS IN FIRST QUARTER AND BY ETHNICITY*

		Second Quarter		
BLACKS N = 41	First Quarter	Low Earner	High Earner	(Total)
	Low Earner	.74	.26	(1.00 = 31)
	High Earner	.00	1.00	(1.00 = 10)

		Second Quarter		
PUERTO RICANS N = 43	First Quarter	Low Earner	High Earner	(Total)
	Low Earner	.55	.45	(1.00 = 29)
	High Earner	.14	.86	(1.00 = 14)

		Second Quarter		
WHITES N = 51	First Quarter	Low Earner	High Earner	(Total)
	Low Earner	.45	.55	(1.00 = 29)
	High Earner	.14	.86	(1.00 = 22)

* Graduates who earned more than $470 in a quarter are classifies as "high-earners"; those earning $470 or less are classified as "low-earners". The figure $470 is the median first quarter earnings of all graduates between 1956-1963, including those with no earnings reported in a quarter.

High School of Fashion Industries
New York City
1956-1963 Graduates

Fashion Design
Technical
Females

TABLE F-5

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$2,354	(16)	$2,861	(8)	$2,675	(56)	$2,634	(80)
1-1/2 to 2-1/2 Years	2,651	(14)	2,374	(12)	3,059	(51)	2,958	(77)
2-1/2 to 3-1/2 Years	3,230	(12)	3,471	(6)	3,687	(33)	3,618	(51)
3-1/2 to 4-1/2 Years	3,832	(8)	(D)	(4)	4,062	(14)	3,931	(26)
4-1/2 to 5-1/2 Years	(D)	(4)		(-)	(D)	(2)	3,772	(6)
5-1/2 to 6-1/2 Years		(-)		(-)		(-)		(-)
6-1/2 to 7-1/2 Years		(-)		(-)		(-)		(-)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Fashion Design
Vocational
Females

TABLE F-6

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$2,405	(12)	$2,742	(21)	$2,580	(23)	$2,602	(56)
1-1/2 to 2-1/2 Years	2,642	(7)	2,952	(12)	$3,105	(10)	2,875	(29)
2-1/2 to 3-1/2 Years	(D)	(1)	(D)	(1)		(-)	(D)	(2)
3-1/2 to 4-1/2 Years	(D)	(1)	(D)	(2)		(-)	(D)	(3)
4-1/2 to 5-1/2 Years		(-)		(-)		(-)		(-)
5-1/2 to 6-1/2 Years		(-)		(-)		(-)		(-)
6-1/2 to 7-1/2 Years		(-)		(-)		(-)		(-)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Fashion Merchandising
Vocational
Females

TABLE F-7

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$2,276	(7)	$1,965	(13)	$2,801	(17)	$2,372	(37)
1-1/2 to 2-1/2 Years	2,577	(9)	2,725	(11)	3,061	(15)	2,802	(35)
2-1/2 to 3-1/2 Years	2,715	(5)	2,967	(12)	3,535	(10)	3,210	(27)
3-1/2 to 4-1/2 Years	3,378	(5)	2,903	(8)	3,920	(6)	3,387	(19)
4-1/2 to 5-1/2 Years	(D)	(2)	(D)	(3)	(D)	(4)	4,185	(9)
5-1/2 to 6-1/2 Years		(-)		(-)		(-)		(-)
6-1/2 to 7-1/2 Years		(-)		(-)		(-)		(-)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Fur Garment Mfg.
Vocational
Males

TABLE F-8

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

AFTER GRADUATION	BLACK Earnings (Base)		PUERTO RICAN Earnings (base)		WHITE Earnings (Base)		TOTAL Earnings (Base)	
1/2 to 1-1/2 Years	$1,913	(6)	(D)	(1)	$2,020	(8)	$2,083	(15)
1-1/2 to 2-1/2 Years	1,950	(7)	(D)	(1)	2,754	(7)	1,950	(15)
2-1/2 to 3-1/2 Years	2,759	(7)	(D)	(2)	2,386	(6)	2,162	(15)
3-1/2 to 4-1/2 Years	1,740	(7)	(D)	(1)	3,087	(6)	2,214	(14)
4-1/2 to 5-1/2 Years	(D)	(4)	(D)	(1)	3,792	(5)	3,090	(10)
5-1/2 to 6-1/2 Years	(D)	(2)		(-)	(D)	(4)	3,771	(6)
6-1/2 to 7-1/2 Years	(D)	(1)		(-)	(D)	(3)	(D)	(4)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Garment Operating
Vocational
Females

TABLE F-9

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings (Base)	PUERTO RICAN Earnings (Base)	WHITE Earnings (Base)	TOTAL Earnings (Base)
1/2 to 1-1/2 Years	$2,041 (149)	$2,029 (54)	$2,472 (54)	$2,133 (257)
1-1/2 to 2-1/2 Years	2,230 (127)	2,323 (33)	2,882 (42)	2,350 (202)
2-1/2 to 3-1/2 Years	2,534 (96)	2,368 (27)	3,045 (33)	2,614 (156)
3-1/2 to 4-1/2 Years	2,433 (76)	2,563 (23)	3,179 (23)	2,609 (122)
4-1/2 to 5-1/2 Years	2,840 (59)	2,502 (17)	3,340 (17)	2,850 (93)
5-1/2 to 6-1/2 Years	2,857 (40)	2,649 (8)	3,017 (12)	2,795 (60)
6-1/2 to 7-1/2 Years	2,980 (13)	(D) (3)	2,855 (7)	2,980 (23)

(D) Withheld to avoid disclosing
figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Interior Decorating
Vocational
Females

TABLE F-10

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$1,990	(10)	(D)	(3)	$3,007	(10)	$2,695	(23)
1-1/2 to 2-1/2 Years	2,920	(5)	(D)	(4)	3,140	(6)	2,969	(15)
2-1/2 to 3-1/2 Years	2,903	(9)	(D)	(3)	3,368	(5)	3,012	(17)
3-1/2 to 4-1/2 Years	3,290	(6)		(-)	(D)	(1)	3,359	(7)
4-1/2 to 5-1/2 Years	2,674	(9)		(-)		(-)	2,674	(9)
5-1/2 to 6-1/2 Years	(D)	(3)		(-)		(-)	(D)	(3)
6-1/2 to 7-1/2 Years	(D)	(2)		(-)		(-)	(D)	(2)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Men's Tailoring
Vocational
Males

TABLE F-11

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$1,994	(74)	$2,417	(26)	$3,121	(20)	$2,242	(120)
1-1/2 to 2-1/2 Years	2,252	(79)	2,307	(24)	3,263	(18)	2,456	(121)
2-1/2 to 3-1/2 Years	2,883	(53)	3,097	(19)	3,063	(15)	3,055	(87)
3-1/2 to 4-1/2 Years	3,232	(45)	3,631	(7)	4,717	(11)	3,303	(63)
4-1/2 to 5-1/2 Years	3,753	(31)	(D)	(4)	(D)	(4)	3,753	(39)
5-1/2 to 6-1/2 Years	3,049	(29)	(D)	(2)	(D)	(2)	3,049	(33)
6-1/2 to 7-1/2 Years	2,782	(19)	(D)	(1)		(-)	3,010	(20)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Millinery
Vocational
Females

TABLE F-12

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$1,729	(10)	(D)	(1)	$2,765	(10)	$2,239	(21)
1-1/2 to 2-1/2 Years	2,149	(11)	(D)	(2)	2,917	(8)	2,453	(21)
2-1/2 to 3-1/2 Years	2,751	(8)	(D)	(1)	2,753	(6)	2,765	(15)
3-1/2 to 4-1/2 Years	2,770	(8)	(D)	(1)	(D)	(2)	2,777	(11)
4-1/2 to 5-1/2 Years	2,933	(7)		(-)	(D)	(1)	2,958	(8)
5-1/2 to 6-1/2 Years	3,090	(5)		(-)	(D)	(1)	3,069	(6)
6-1/2 to 7-1/2 Years	(D)	(1)		(-)		(-)	(D)	(1)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Shoe Fitting
Vocational
Males

TABLE F-13

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$2,492	(16)	$2,682	(7)	$2,155	(13)	$2,492	(36)
1-1/2 to 2-1/2 Years	2,500	(17)	2,782	(7)	1,988	(12)	2,529	(36)
2-1/2 to 3-1/2 Years	2,906	(16)	3,292	(6)	3,322	(8)	3,083	(30)
3-1/2 to 4-1/2 Years	2,950	(14)	(D)	(4)	4,475	(7)	3,248	(25)
4-1/2 to 5-1/2 Years	2,721	(10)	(D)	(2)	4,204	(5)	3,374	(17)
5-1/2 to 6-1/2 Years	4,560	(5)	(D)	(2)	(D)	(4)	4,081	(11)
6-1/2 to 7-1/2 Years	(D)	(2)	(D)	(1)	(D)	(3)	4,542	(6)

(D) Withheld to avoid disclosing
figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Trade Dressmaking
Technical
Females

TABLE F-14

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	(D)	(3)	(D)	(2)	$2,701	(16)	$2,653	(21)
1-1/2 to 2-1/2 Years	(D)	(3)	(D)	(3)	2,855	(19)	2,829	(25)
2-1/2 to 3-1/2 Years	(D)	(3)	(D)	(2)	3,168	(19)	3,108	(24)
3-1/2 to 4-1/2 Years	(D)	(2)	(D)	(2)	3,440	(17)	3,259	(21)
4-1/2 to 5-1/2 Years	(D)	(2)	(D)	(2)	3,634	(15)	3,602	(19)
5-1/2 to 6-1/2 Years	(D)	(3)	(D)	(2)	4,178	(11)	4,056	(16)
6-1/2 to 7-1/2 Years		(-)		(-)	4,504	(6)	4,504	(6)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Trade Dressmaking
Vocational
Females

TABLE F-15

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings (Base)	PUERTO RICAN Earnings (Base)	WHITE Earnings (Base)	TOTAL Earnings (Base)
1/2 to 1-1/2 Years	$2,160 (104)	$2,216 (104)	$2,699 (104)	$2,322 (312)
1-1/2 to 2-1/2 Years	2,373 (82)	2,566 (86)	3,056 (94)	2,617 (262)
2-1/2 to 3-1/2 Years	2,691 (57)	2,847 (60)	3,237 (69)	2,897 (186)
3-1/2 to 4-1/2 Years	2,725 (48)	3,232 (41)	3,511 (46)	3,274 (135)
4-1/2 to 5-1/2 Years	2,963 (32)	3,266 (28)	3,720 (29)	3,195 (89)
5-1/2 to 6-1/2 Years	2,882 (26)	3,769 (24)	3,789 (21)	3,534 (71)
6-1/2 to 7-1/2 Years	2,856 (11)	3,577 (19)	3,708 (6)	3,524 (36)

High School of Fashion Industries
New York City
1956-1963 Graduates

Upholstery
Vocational
Males

TABLE F-16

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$2,410	(14)	$2,886	(9)	$2,309	(18)	$2,456	(41)
1-1/2 to 2-1/2 Years	2,084	(13)	2,174	(8)	2,909	(17)	2,361	(38)
2-1/2 to 3-1/2 Years	2,[illegible]1	(-4)	(D)	(4)	3,224	(10)	2,765	(28)
3-1/2 to 4-1/2 Years	2,994	(9)	(D)	(3)	3,637	(12)	3,140	(24)
4-1/2 to 5-1/2 Years	3,373	(5)	(D)	(1)	3,140	(7)	3,373	(13)
5-1/2 to 6-1/2 Years	(D)	(4)		(-)	(D)	(4)	3,750	(8)
6-1/2 to 7-1/2 Years	(D)	(1)		(-)	(D)	(2)	(D)	(3)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries
New York City
1956-1963 Graduates

Women's Garment Mfg.
Vocational
Males

TABLE F-17

MEDIAN EARNINGS AFTER GRADUATION
FOR FOUR-QUARTER WORKERS,
BY TIME ON LABOR MARKET

PERIOD AFTER GRADUATION	BLACK Earnings	(Base)	PUERTO RICAN Earnings	(Base)	WHITE Earnings	(Base)	TOTAL Earnings	(Base)
1/2 to 1-1/2 Years	$2,129	(30)	$2,273	(13)	$2,733	(56)	$2,543	(99)
1-1/2 to 2-1/2 Years	2,468	(28)	3,057	(10)	3,131	(47)	2,881	(85)
2-1/2 to 3-1/2 Years	3,028	(24)	3,139	(10)	3,463	(40)	3,265	(74)
3-1/2 to 4-1/2 Years	3,269	(25)	3,074	(7)	3,728	(37)	3,357	(69)
4-1/2 to 5-1/2 Years	3,355	(24)	(D)	(4)	4,872	(29)	3,993	(57)
5-1/2 to 6-1/2 Years	4,039	(15)	(D)	(3)	4,284	(20)	4,283	(38)
6-1/2 to 7-1/2 Years	5,094	(5)		(-)	4,860	(11)	4,977	(16)

(D) Withheld to avoid disclosing figures for individual graduates

High School of Fashion Industries, New York City

TABLE F-18

1956-1963 Graduates

MEDIAN PUERTO RICAN EARNINGS AS A PERCENT OF MEDIAN OTHER EARNINGS, BY PERIOD AFTER GRADUATION AND BY TRADE

TRADE	PERIOD AFTER GRADUATION						
	½-1½ Years	1½-2½ Years	2½-3½ Years	3½-4½ Years	4½-5½ Years	5½-6½ Years	6½-7½ Years
1. Fashion Design - Technical - Females	107	78	94	-	-	-	-
2. Fashion Design - Vocational - Females	106	95	-	-	-	-	-
3. Fashion Merchandising - Vocational - Females	70	89	84	74	-	-	-
4. Fur Garment Mfg. - Voc. - Males	-	-	-	-	-	-	-
5. Garment Operating - Voc. Females	82	81	78	81	75	87	-
6. Interior Decorating - Voc. - Females	-	-	-	-	-	-	-
7. Men's Tailoring - Vocational - Males	77	71	101	77	-	-	-
8. Millinery - Vocational - Females	-	-	-	-	-	-	-
9. Shoe Fitting - Vocational - Males	124	140	99	-	-	-	-
10. Trade Dressmaking - Technical - Females	-	-	-	-	-	-	-
11. Trade Dressmaking - Vocational - Females	82	84	88	92	88	99	96
12. Upholstery - Vocational - Males	125	75	-	-	-	-	-
13. Women's Garment Manufacturing - Vocational - Males	82	98	91	82	-	-	-

High School of Fashion Industries, New York City — TABLE F-19 — 1956-1963 Graduates-

MEDIAN BLACK EARNINGS AS A PERCENT OF MEDIAN PUERTO RICAN EARNINGS, BY PERIOD AFTER GRADUATION AND BY TRADE

TRADE	PERIOD AFTER GRADUATION						
	½-1½ Years	1½-2½ Years	2½-3½ Years	3½-4½ Years	4½-5½ Years	5½-6½ Years	6½-7½ Years
1. Fashion Design - Technical - Females	82	111	93	-	-	-	-
2. Fashion Design - Vocational - Females	88	89	-	-	-	-	-
3. Fashion Merchandising - Vocational - Females	116	95	92	116	-	-	-
4. Fur Garment Mfg. - Voc. - Males	-	-	-	-	-	-	-
5. Garment Operating - Voc. - Females	101	96	108	97	113	108	-
6. Interior Decorating - Voc. - Females	-	-	-	-	-	-	-
7. Men's Tailoring - Vocational - Males	82	98	93	89	-	-	-
8. Millinery - Vocational - Females	-	-	-	-	-	-	-
9. Shoe Fitting - Vocational - Males	93	90	88	-	-	-	-
10. Trade Dressmaking - Technical - Females	-	-	-	-	-	-	-
11. Trade Dressmaking - Vocational - Females	97	92	95	84	91	76	80
12. Upholstery - Vocational - Males	84	96	-	-	-	-	-
13. Women's Garment Manufacturing - Vocational - Males	93	81	96	106	-	-	-

High School of Fashion Industries, New York City TABLE F-20

MEDIAN BLACK EARNINGS AS A PERCENT OF MEDIAN OTHER EARNINGS, BY PERIOD AFTER GRADUATION AND BY TRADE

TRADE	PERIOD AFTER GRADUATION						
	½-1½ Years	1½-2½ Years	2½-3½ Years	3½-4½ Years	4½-5½ Years	5½-6½ Years	6½-7½ Years
1. Fashion Design - Technical - Females	88	87	88	94	-	-	-
2. Fashion Design - Vocational - Females	93	85	-	-	-	-	-
3. Fashion Merchandising - Vocational - Females	81	84	77	86	-	-	-
4. Fur Garment Mfg. - Voc. - Males	95	71	116	56	-	-	-
5. Garment Operating - Voc. - Females	83	77	84	78	85	94	104
6. Interior Decorating - Voc. - Females	66	93	86	-	-	-	-
7. Men's Tailoring - Vocational - Males	64	69	94	69	-	-	-
8. Millinery - Vocational - Females	63	74	100	-	-	-	-
9. Shoe Fitting - Vocational - Males	116	128	88	66	65	-	-
10. Trade Dressmaking - Technical - Females	-	-	-	-	-	-	-
11. Trade Dressmaking - Vocational - Females	80	78	83	78	80	76	77
12. Upholstery - Vocational - Males	104	72	78	82	107	-	-
13. Women's Garment Manufacturing - Vocational - Males	77	79	87	88	69	94	105